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YOUTH AND REVOLUTION. I

BY VINCENT SHEEAN

DURING the winter of 1926-27, after adventures as a foreign correspondent ranging from Geneva and the League to Persia and the Rif, I came to think, reading the contradictory and sketchy reports in the London and Paris papers, that the Chinese Revolution in its present stage was an event — a whole school of events — that I could hardly bear to miss. Certain kinds of events to which newspapers gave their attention had had this effect on me for years, and had to be explained (when I thought of it) by the antique fancy that newspaper men, like fire horses, could never outgrow their instinct for the 'game.' It seems to me now that this was no explanation, for the events that aroused my fire-horse instinct were not, actually, the ones the newspapers found most interesting. The events that aroused in me the desire to attend, to witness, were invariably those in which large numbers of men were engaged in some difficult enterprise involving a fundamental idea — an idea of race, class, or even of nation. In what looked like the impending triumph of the Chinese

Revolution there was an event of the exact kind that excited my imagination to the utmost. Without regard to what kind of job I might do in China, I wanted above all to get there; and eventually, with the help of the North American Newspaper Alliance, I did.

I

I arrived in China at the most fateful moment of the national revolution, that in which the victors surveyed the field and took stock of themselves. It was not a good moment for a journalist: from the professional point of view, I was too late. The capture of Shanghai and the sack of Nanking had been the high points of interest for the newspapers in America, and by the time I got to Shanghai the 'story,' as we say in the language of the trade, was already fading into obscurity. Moreover, the particular kind of personal exploit that my employers wanted of me — what they called, in their cabled instructions, 'personal adventures' — proved impossible in a country where, so far as I could discover, all the in-

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habitants when treated with courtesy were invariably courteous and kind. I made various attempts to encounter 'personal adventures' in parts of China from which all foreigners had fled, and never got so much as a harsh word out of any Chinese. Consequently the whole result of my experience in China was, so far as my newspapers were concerned, flat failure.

But from another point of view, the one adopted in this narrative, the experience was richer in consequences than any other I have to record. Here, for the first time, I began to approach the fundamental meaning of those vast disturbances that had fascinated me (in part unconsciously) for years — began to be able to discern the general under the particular, to take what Borodin called 'the long view.' In my first direct meeting with the Bolshevik philosophy in action (even in rather circumscribed action) I was disturbed by the precision with which it answered the questions I had begun to think unanswerable — the questions of a sensible relationship between one life and the many. Whether the Bolshevik solutions were the correct ones was another matter, which might take a long time to determine, but they were at least solutions, and represented the effort of human thought to bring order into the chaos that on every side oppressed and appalled the imagination.

I do not mean to say, of course, that I had known nothing about the Communist view of life before I went to China. I had as much acquaintance with it as most people have, — perhaps more, — and had even read a certain amount of its literature, including huge indigestible lumps of Karl Marx. But the difference between an academic acquaintance with Communism and an actual perception of its spirit is very great. The step required to pass from the first state to the second is so easy that it may be accomplished in a mo-

ment, and so difficult that it may involve the effort of a lifetime. It may be compared, I think, to the step by which, at an equally momentous frontier in literature, we pass into the world created by the *Divina Commedia*.

Every schoolboy knows about the *Divina Commedia*: how Dante, having lost his way in a dark wood, was found by Vergil and conducted into the depths of Hell, rising from there to Purgatory and to the circles of Paradise, through which he was led by the blessed Beatrice. But this knowledge of the vast, perfect poem is no knowledge at all; it is like being told in the schoolroom that Paris is the capital of France, a bald statement that can only become a living fact when we have smelled the acacias and eaten the food and investigated the literature that make it true. With Dante the difficulty of the language supplies another barrier (even for Italians); but when the step has at last been taken, the barrier passed, we enter a world in which all parts of the structure of existence are so related and harmonized, so subjugated to a sovereign system, that its ordered beauty and majesty give us the sensation of a new form of life, as if we had moved off into space and taken up our abode, for a time, on another star.

Such miraculous translations are rare and difficult; it took me thirty-four years to set foot inside the world of Dante. The world of Lenin (which is, in effect, all around us) can be entered in a moment, but only if the disposition of circumstances, persons, influences, can conquer the laziness of a bourgeois mind. The required combinations occurred for me at Hankow, and were given force and form, particularly, by Michael Borodin and Rayna Prohme.

II

But before I went up the river to Hankow I had to make the acquaint-

ance of the parts of the Chinese revolutionary movement that had already begun to be corrupted by power — the counter-revolutionary group of Shanghai and Nanking. Its position was interesting and typical; some such position is always assumed by middle-class revolutionaries at the moment of triumph, and Chiang Kai-shek, the shrewd young man, was even then engaged in the Kerensky-like manoeuvres that were to make him President (so to speak) of China.

It might be useful to recall, just here, what the course of the Chinese national revolution had been up to 1927. It was a long, slow, cumulative movement, the awakening of a giant; it had been going on for thirty-odd years. Its original organization was the work of the great revolutionary Sun Yat-sen, whose power to move and convince throngs of people had made him the natural leader of the whole South, and, for a time, of all China. In 1911, with the overthrow of the Manchu dynasty, Sun Yat-sen had been proclaimed President of China at Nanking, but, robbed of the actual power by the clever reactionary, Yuan Shih-kai, had retired to Canton to establish there the central point, the focus, for all revolutionary activity. Even in Canton, Sun Yat-sen's career was checkered; he was always being driven out and returning in triumph.

In 1923, pursuing their announced policy of friendliness to all Asiatic national movements, the Bolsheviks (through Joffe, their ambassador at Peking) made an agreement with Sun Yat-sen by which they were to supply him with military and political advisers, money and munitions. From this point onward the development of the Cantonese revolutionary movement was rapid and overwhelmingly successful. The Bolsheviks had given Sun Yat-sen what he needed, an army. They also moulded, to some extent,

the ideas of the movement, although Sun Yat-sen himself never became a Communist, and always, apparently, believed that it would be possible for China to assume the forms of an organized industrial society without going through any kind of class warfare. Sun Yat-sen himself died in 1925, but the movement, becoming increasingly social and economic, with an intensive labor propaganda, became harder to resist after his death than it had been before. The various war lords who governed China on the feudal system dreaded it, and with reason, for it was by its nature inimical to them even when it made use of their services.

Finally, in 1927, the armies of Canton had swept all the way up to the Yangtze-kiang, had taken Hankow, Shanghai, and Nanking, and with them the revenues of the richest part of China. The capture of Nanking, about two weeks before I arrived in Shanghai, had been marked by a collapse of discipline; certain of the Cantonese troops had run wild in the city, looting, raping, and killing. These incidents — 'the Nanking outrages' — had been promptly avenged by an Anglo-American bombardment of the city, in which numerous noncombatants were killed. Antiforeign feeling, always very strong among the Chinese revolutionaries, was at a high pitch indeed, and all foreigners had been ordered (by their own governments) to leave the interior of China and concentrate at Shanghai and Tientsin. The Cantonese movement had, practically speaking, won its victory, for it was only a question of time until the remaining war lords (the chief of whom was old Chang Tso-lin, supported by the Japanese) would be swept out of the way by the better trained and equipped soldiers, and by the enormously persuasive propaganda, from the South.

This moment of triumph was inevitably the one in which the two ele-

ments among the Cantonese victors would separate. Genuine revolutionaries — those who wished to change the conditions of life in China, and not simply the forms or names of government — found themselves obliged to cling to the Left Wing of the Kuomintang, in which Russian influence was paramount. The others — those who took part in the revolution for their own advantage, or were prevented by the tenacity of middle-class ideas from wishing to disturb the established arrangement of wealth — collected around the treasuries of Shanghai and Nanking, under the patronage of the Chinese bankers of those cities and their new ally, Chiang Kai-shek. The Left Wing had its capital at Hankow, and the Right Wing at Nanking. The division was not yet open and public, and the Kuomintang (People's Party — Sun Yat-sen's old organization) kept up a pretense of unity for some time, but the opposition of the two tendencies was too glaring to be denied in private talk, and constituted, in fact, the chief immediate problem of the revolution.

I went, first, to see Mr. T. V. Soong. He was a young man of about my own age, trained at Harvard, intelligent, competent, and honest, and had been Minister of Finance for the Cantonese government. The same post had been assigned to him at Hankow and also at Nanking, but at the precise moment of my arrival he had resigned it. He continued resigning it for years, only to take it up again, until he became a kind of permanent Minister of Finance in all the Kuomintang governments. His usefulness came not only from the confidence inspired by his known capacity and honesty, but from his relationship to the semi-divine figure of Sun Yat-sen: he was a brother of the great man's widow. When I arrived in Shanghai he was living in Sun Yat-sen's house in the French

Concession, the house given the old hero by the city for a permanent refuge in his turbulent career.

Mr. Soong — 'T. V.,' as he was always called — received me well. He spent some time explaining to me the difficulties of his own position, a problem that always worried him a good deal. As I came to know T. V. rather better in the following months, I grew to regard him as the most typical Liberal I had ever known — honest, worried, puzzled, unable to make up his mind between the horrors of capitalist imperialism and the horrors of Communist revolution. If China had only been America, his happiness would have been complete, for he could have pretended not to know about the horrors. But in China it was impossible to step out of doors without seeing evidence, on every hand, of the brutal and inhuman exploitation of human labor by both Chinese and foreigners. T. V. was too sensitive and too idealistic not to be profoundly moved by such spectacles. And yet he had an equally nervous dread of any genuine kind of revolution; crowds frightened him, labor agitation and strikes made him physically ill, and the idea that the rich might ever be despoiled filled him with alarm. During a demonstration in Hankow one day his motor car was engulfed by a mob and one of its windows was broken. He was, of course, promptly rescued by his guards and removed to safety, but the experience had a permanent effect on him — gave him the nervous dislike for mass action that controlled most of his political career and threw him at last, in spite of the sincerity of his idealism, into the camp of the reactionaries. He was an amiable, cultivated, and charming young man, but he had no fitness for an important rôle in a great revolution. On the whole, I believe he realized it, and was made more miserable by that fact than by any other.

III

Hankow, Wuchang, Hanyang, the three great cities called, together, Wuhhan, blackened the flat shores of the river early on the fifth day of my journey from Shanghai. Of the three cities, Hankow was the most important, although not the largest. It was the one in which the foreigners had built their own city, in concessions taken from the Chinese in the nineteenth century. The Germans, Russians, and Americans having been counted out for assorted reasons, the foreign city consisted, in 1927, of the British, French, and Japanese Concessions — or, practically, of the first two, since the Japanese Concession was almost indistinguishable from the Chinese town.

My first interviews were with Borodin and Chen, whose names were best known in the world at large as representatives of the point of view of Hankow, of the Left Kuomintang. Borodin had never sought public attention and disliked giving interviews, but by this time it was no longer possible for him to avoid them. Eugene Chen loved public attention as a cat loves milk, and was at his best in an interview, rolling forth his grand, oratorical sentences with long pauses so that they might be written down in detail. Both Borodin and Chen used English, not only with representatives of the press, but in their communications with each other and with most of the other members of the Hankow government, for neither had a good command of Chinese. Chen was Foreign Minister, the spokesman for all his colleagues, and so could freely exercise his gifts as a proclamation-monger. Borodin, chief of the Russian advisers, tried to avoid speaking for the Hankow government, and restricted himself as much as he could, with interviewers whom he did not know, to discussions of principle.

My first impressions of both Borodin and Chen were overlaid by a mass of later impressions, by a whole tangle of experience in China and Russia in which they figured, and yet that first view of them in Hankow still seems to me clear and substantially correct. Borodin, a large, calm man with the natural dignity of a lion or a panther, had that special quality of being in, but above, the battle that seems to me to deserve, in itself and without regard to the judgment of the world, the name of greatness. His slow, resolute way of talking, his refusal to be hurried or to get excited, his insistence upon the fundamental lines of action that determined detailed events, gave a spacious and deliberate character to his conversation, lifting it far above the shallowness of journalism and the hysteria of politics. He seemed to take 'the long view' by nature, by an almost physical superiority of vision.

As I knew him better I perceived — or, rather, he showed me — how his political philosophy made breadth and elevation inevitable in the mind that understood it. He was an Old Bolshevik; that is, he had been a member of the Leninist school since its underground days before the war. His exile had been spent in the United States, where he acquired a better immediate knowledge of the industrial system than was common among Bolshevik intellectuals. He had returned to Russia in 1917, to 'party work,' and had been entrusted with the Chinese mission in 1923. His whole adult life had been spent in the service of a system of thought in which the immediate event was regarded as meaningless unless related to other events on both sides in point of time; in which the individual was valued by his relationship to his fellow beings; in which the most important of processes was held to be the comprehension, however disagreeable, of cause and

effect. Such ways of thinking were required by the Bolshevik system, and the mind exercised in them through years of activity had no time or room for egotism, pettiness, fussiness, immediate hysteria. If one disregarded the economic structure (Marxian economics) with which the Bolshevik mind was preoccupied, it could be seen that the method of thought in itself was 'good' — produced, as in the case of Borodin, a clear, calm, and comprehensive view of life.

Borodin himself would have attributed the quality I have called greatness (the quality of being in, but above, the battle) to the political philosophy and to nothing else. He would have said that the philosophy gave 'historical perspective,' and that historical perspective, once thoroughly understood, enabled the mind to inhabit a clearer air. But as, during the succeeding months, I came to know a number of other Communists more or less well, I was obliged to conclude that this was not so. However adequately they may have learned their political philosophy, it did not always lift them above the mud in which we flounder; a Communist could be just as stupid, petty, and egotistical as any bourgeois. Borodin would have said that such a Communist was not a good Communist — which, although probably true, demolished the idea that an acquired political philosophy was alone enough to raise human beings to the highest power of which they were capable in the conduct of life. The political philosophy had to be thoroughly understood, articulated, and applied, made into a constant medium in which the good Communist could live as the saints lived in God, as the fish live in the sea. Something like this must have happened before 'the long view' and the reasoned plan of existence came to be Borodin's native element, from which he could look calmly upon the chaos

of immediate events; but since it worked for him and not for others, there must also have been in his nature, from the beginning, an aptitude for reflection, a capacity for detached thought, superior to the aptitudes and capacities of other men who professed the same beliefs without thereby coming a shade nearer the stars.

IV

The door at the end of the darkened reception room on the second floor of the Ministry of Finance opened, and in came a small, shy Chinese lady in a black silk dress. In one of her delicate, nervous hands she held a lace handkerchief, in the other my note of introduction from T. V. Soong, given me in Shanghai. When she spoke, her voice almost made me jump, it was so soft, so gentle, so unexpectedly sweet. The shutters had been closed to keep out the heat, and I could not see her until she had come quite near me. Then, looking down in bewilderment, I wondered who on earth she could be. Did Madame Sun Yat-sen have a daughter of whom I had never heard? It honestly did not occur to me that this exquisite apparition, so fragile and timorous, could be the actual lady herself, the most celebrated woman revolutionary in the world.

'You saw my brother in Shanghai,' she said hesitantly. 'Tell me, how is he?'

It was Madame Sun.

For a good ten minutes we were at sea. She struggled to overcome her own timidity with but little help from my side, for I was experiencing the complicated disorders described in the fine cockney phrase 'struck all of a heap.' I was 'struck all of a heap' by Madame Sun, a heap compounded of many things: her loveliness, her gentleness, the shy purity of her voice and eyes;

my own incompetence and clumsiness; and, perhaps the most confusing of all, the utter unexpectedness of the event.

I had heard an enormous number of things about her, most of them lies. The American newspapers had surpassed themselves on the subject. According to them, Madame Sun was 'China's Joan of Arc'; she was the leader of a Chinese 'woman's battalion'; she was this, that, and the other thing, depending on the fantasies of the headline writers. The notion that she had actually led troops in battle was so widespread that even in China some of the foreigners believed it. In Shanghai this grotesque legend was complicated by more offensive lies, in which her personal character and motives were attacked — a favorite method of political argument in the treaty ports. Although I had sense enough not to believe most of the stories about her, they must have made, collectively, some kind of impression, for I had certainly expected to meet something formidable. And instead, here I was face to face with a childlike figure of the most enchanting delicacy, only too plainly trembling with terror at the sight of me. Never had I felt so big and clumsy, so hopelessly barbarian.

But Madame Sun was aided by a number of characteristics that always enabled her, with an effort, to conquer her own timorousness — not only with me, that is, but in the general conduct of life. She had endless reserves of dignity, a dignity so natural and certain that it deserved the name of stateliness. The same quality can occasionally be observed in royal princes or princesses of Europe, especially in the older ones; but with them it is a clear result of lifelong training. Madame Sun's stateliness was of a different, a more intrinsic quality; it came, so to speak, from the inside out,

instead of being put on like a harness. She also possessed moral courage to a rare degree, which could keep her steadfast and unflinching in the presence of any grave peril. Her loyalty to the name of Sun Yat-sen, to the duty she felt she owed it, was able to withstand trials without end. These qualities — dignity, loyalty, moral courage — gave her character an underlying strength that could, at times, overcome the impressions of fragility and shyness created by her physical appearance, and endow her figure with the sternest aspect of heroism. Death itself could not intimidate her; poverty and exile, the fury of her own family and the calumnies of the world, were unable to bend her inflexible will toward courses she felt to be wrong. She was; in a truer sense than the merely physical one intended by the headline writers, 'China's Joan of Arc,' but you had to know her for a good while before you realized the power of the spirit beneath that exquisite, tremulous envelope.

Madame Sun was born Rosalind Soong (Soong Ching-ling), of a family of rich Shanghai merchants. The Soongs belonged to the very comprador class attacked by the Chinese Revolution — the class that had grown rich in traffic with the foreigners, and had strong economic interests in the maintenance of the old régime. Soong Ching-ling was educated in the United States (in Wesleyan College, at Macon, Georgia) and returned to China when she was nineteen. It was then that the Tsung Li met, fell in love with, and married her. He was a great deal older than she was, but he had all the magic of a name that had already assumed symbolic significance in China; and whatever his other qualities may have been, Sun Yat-sen must have possessed a rare and wonderful power of personal influence. Few men in history have had his gift of commanding

devotion. In his long, adventurous life, which reads like the invention of a romantic writer, he was constantly being saved from death or disaster by the extraordinary fidelity of his friends. The last of his faithful followers was his second wife, his present widow, who was to carry her loyalty to his person and his ideals (quixotically, perhaps) far beyond the grave.

Madame Sun's friends used sometimes to discuss a question suggested by the contrast between her natural shyness, her love of privacy, and the public rôle she was obliged to play. It was this: what might have been the development of her life if she had never met Sun Yat-sen? A theory advanced was that, left to herself, she would have married 'well' and spent her time in all the private dignity and family self-sufficiency of a rich Chinese lady in Shanghai. It is possible. But no character can be studied in this way after the events that shaped it have taken their place in the ordered memory of the past. A fusion has occurred; single strands of character no longer mean anything; the nexus alone can be made to yield some of the secrets of a human personality. The nexus in this case was the marriage, which subjected Soong Ching-ling in her first youth to the most powerful influence of revolutionary idealism China has ever known. She traveled with Sun Yat-sen, acted as his secretary, participated with him in mass meetings and party councils, public triumphs and secret flights. She learned to share his passionate indignation at injustice of every kind, his determination to organize and prolong the revolt of the masses until the whole country had been brought under a national party dictatorship for the three objectives

of his revolution — the *San Min Chu I*: Democracy, Nationalism, Social Welfare.

These experiences, these ideas, transformed the shy young girl, the possible fine lady, into a woman with a character of tempered steel. When Sun Yat-sen died she took her place in the Central Executive Committee and the other governing bodies of the Kuomintang, and in spite of her dislike for debate, public speaking, or public appearances, she performed her duties to the party without complaint. At the time of my arrival in China, in the open schism in the party, she had already resolutely taken her place with the faction of the Left Kuomintang and its Communist minority.

That was Madame Sun when I first saw her. The tragic events of the following months, the massacre of the Communists, the crushing of the labor movement in blood, were to arouse her indignation to such a pitch that she seemed, almost before one's eyes, to take on stature. Without physical or intellectual power, by sheer force of character, purity of motive, sovereign and consistent honesty, she became heroic. In the clamorous wreck and ruin of the Chinese Revolution, this phenomenon was one of the most extraordinary: generals and orators fell to pieces, yielded, fled, or were silent, but the one revolutionary who could not be crushed and would not be still was the fragile little widow of Sun Yat-sen. A 'doll,' they used to call her sometimes in the treaty ports. The world would be a less painful object of contemplation if it contained a few more such 'dolls.'

So I thought then, as now I think.

And still I had not yet seen Rayna Prohme.

(To be continued)

WHAT ARE REPUBLICANS FOR?

BY EVERETT CASE

I

Not long ago it was the fashion to denounce the Congress of the United States as an outmoded vehicle. It would not go. It could only generate friction. Its wind resistance was the despair of highly trained engineers. Not least of the Roosevelt miracles, then, is the streamlined, high-speed Congressional model for 1933-34. If, on approaching the neighborhood of fall elections, its performance became somewhat uneven, none will deny that it has performed prodigies of swiftness.

There was, for example, a certain day in February when the House squandered no more than forty minutes in adding another billion dollars to federal relief appropriations. The administration needed the money, principally to support the CWA for another few weeks; Chairman Buchanan seems to have silenced the opposition with the single unanswerable question, 'Who are we to tie the President's hands in this work?' Who indeed, the echoes answered, as party lines were obliterated in the rush to support the President.

There was a lone dissenter. Mr. Terrell of Texas had the temerity to object. He denounced the CWA as a 'never-ending drain on the resources of the government.' He made a more serious charge. 'I think it is going to start civil war and revolution when we do stop it,' he declared. 'I don't need

any office, and I am going to exercise my constitutional right and vote as I please. . . . I would n't sell my independence for any office I ever saw. The rest can vote like a herd of dumb, driven cattle if they want to, but no one is going to crack a whip behind me.'

This minor episode in the annals of Congress is cited not to present Mr. Terrell of Texas as the vanishing American. Nor is it intended to suggest that he was right and his 382 colleagues wrong. One may be quite convinced that government can meet the needs of the moment only by making unprecedented demands upon Congress and people, yet deplore as peculiarly untimely the virtual collapse of the opposition.

Mr. Terrell did not complain of loneliness, but his isolation is none the less the significant thing about this little drama. Time was when no American in political opposition need fear for want of company. Indeed, if your old-style individualist — like John Randolph of Roanoke — was ever found supporting the government, it was apt to be because opposition had become so popular as to be quite intolerable.

II

According to Homer (who is not to be trusted), Athene, goddess of wisdom, sprang full-panoplied from the

forehead of Zeus. It is so in the authoritarian state; whether Communist or Fascist, the government is the sole fountainhead of wisdom. Criticism becomes superfluous, opposition frivolous and in practice dangerous.

The real difference between the authoritarian and the democratic state is that the latter denies this picturesque legend. According to democratic doctrine, wisdom is a kind of plant, to be nourished from many sources. It requires constant cultivation, careful pruning, and a good deal of sun and light; above all, it matures slowly. It tends, moreover, to exhaust the soil, which must repeatedly be fertilized if the plant is to be strong and hardy. Stifled by the hothouse, it flourishes and grows tough with exposure to the elements. Its fruit is an enlightened public opinion, democracy's most valuable product and proper sovereign.

Public opinion is not to be confused with public sentiment, which is simply the way the people *feel* about their government. This feeling has always and everywhere to be reckoned with. Democracy insists, however, that just as the emotions need the protection of the intelligence, so public sentiment is all too likely to go astray unless guided and informed by public opinion. Without such protection it becomes a prey to propaganda, against whose wiles your authoritarian state deliberately strips it of all defense. With government the sole propagandist licensed to woo, public sentiment is thus left conveniently at its mercy. That is why we distrust Hitlerism on the one hand and Communism on the other.

But if we place our faith in the rule of public opinion, the collapse of the government's opposition becomes a matter of national concern. To those of us who find it difficult to shed tears over the plight of the Republican

Party, this is a hard saying. That does not invalidate it. You cannot have an effective public opinion without an effective opposition. Freedom of propaganda is no substitute. It merely offers a variety of more or less irresponsible suitors; it affords no assurance that the intentions of one will be any more honorable than the rest. Dazzled or bewildered, public sentiment is prone to succumb to those blandishments which are most plausible and alluring.

It is an axiom in law that no man has a right to an opinion until he has heard the evidence. This does not mean the evidence for the defense, or the evidence for the prosecution. Least of all does it mean the propaganda, pro or con, which may have appeared in the press; indeed, a jurymen who has been prejudiced thereby may be challenged and ruled unfit to serve. Evidence means all relevant facts and admissible testimony from witnesses sworn to tell 'the truth, the whole truth, and nothing but the truth.'

It is only on such evidence that public opinion, properly so-called, can rest. It is a primary function of the opposition to see to it that all the evidence is heard. The administration, obviously, is an excellent agency for publicizing certain facts and certain testimony. It is up to the opposition to challenge inaccurate and irrelevant and inadmissible evidence. Just as obviously, there will be other facts and testimony which the administration is a poor agency for publicizing, but which nevertheless ought to be brought out, and that is the affirmative part of the opposition's job. The administration, as an interested party, will do well if it tells the truth and nothing but the truth; it can hardly be expected to tell the whole truth. In complicated issues, it could not, unless it had a monopoly of wisdom; often it would not if it had.

III

It is fair to say that the Roosevelt Administration does its part. Certainly the President launched his programme with courage and proceeded to defend it with effective simplicity. Certainly his party leadership was not long in doubt. But that is not enough. It is enough, perhaps, in a crisis, when the need is for quick and emergent action. At such a time, opposition does well to abdicate — *temporarily*. But that time has long since passed.

The administration met the crisis masterfully. It subsequently embarked upon a programme of sweeping reforms, some of them drastic, many of them likely to affect profoundly our relations with government and with each other, our characteristic institutions, our habits of thought and way of life. Many of these reforms are necessary, all may conceivably be desirable, but they are not to be purchased without a price. Though all the wares be sound, we shall do well to weigh that price. Above all, we ought to be certain that the goods are designed to meet our real and not our fancied needs, that no better design or quality is obtainable, and that they will wear well. We cannot afford to make such long-term commitments lightly, or accept uncritically even Mr. Roosevelt's superlative salesmanship. He himself has issued a caveat. He pretends to no monopoly of wisdom; he does not, he says, expect to bat 1000.

Meantime, through no fault of the President's, the American people is being let down by an opposition which does not do its part. You do not get your money's worth when the game goes by default.

It is hardly too much to say that the gravest threat to the administration itself comes to-day neither from Tories nor from doubting Thomases,

but from the collapse of the opposition. One can almost imagine Mr. Roosevelt paraphrasing Voltaire and declaring that if there were no opposition we should have to invent one. For political programmes must be dramatized, and no one is more keenly aware than Mr. Roosevelt that the show's the thing. But any show that is not mere display implies a struggle or contest, a contest requires an opponent, and if no opponent will stand and fight, you may have to set up a dummy in order to knock him down. That is not much fun. In the absence of open, organized, and honorable opposition, one is quite likely to drop dark hints of secret sabotage and sinister conspiracy, which may or may not exist. I do not say that this is Mr. Roosevelt's way. I do say that if he were to adopt it the opposition would be partly responsible.

There are other reasons why the Democrats might properly look askance at the sorry state of the G. O. P. An aphorism, well known to practical politicians, asserts that the party in power is never overthrown: it lapses into factions and defeats itself. No one who knows the first thing about American political parties, their sectional and other cleavages, will deny that this is an ever-present danger.

In the long run, nothing welds a party together like persistent and determined opposition. It compels a closing of ranks, stimulates discipline, and so strengthens the hand of leadership. It protects government against itself, by subjecting its measures and the arguments on which they rest to the acid test of criticism. It compels the government to take the long view, by challenging the ultimate benefits of current expedients. In short, it is an integral part of the machinery of government; it is government sifting and testing its own propositions. Effective opposition is consequently second only

to an effective administration in serving the public interest, and the more enterprising the latter, the more important the former.

There will always be occasions when the people lose all faith in the administration and its programme. This happened as recently as 1932. At such times it becomes clear that the opposition is a kind of trustee for the people's faith in democratic processes. So long as it can offer a programme and a leadership which inspire confidence, orderly government proceeds, and the balance wheel has worked. But if the opposition is discredited too, if the people trust neither its leaders nor its programme, what then? What except the bankruptcy of democratic processes? What except receivership for democracy? And who will the receiver be, if not the demagogue or the dictator — or both rolled into one?

IV

If opposition has important public functions, there is a bastard variety, using its name, which serves only to discredit it. Being fractious and unscrupulous, it knows no principle except to embarrass the government. Its only policy is to grasp whatever political advantage it can seize by hook or crook. To advance its fortunes, it relies conspicuously on a kind of infamous horseplay. Happily, fortunes are not always advanced thereby. Where the Republican 'opposition' has been active at all, it has been chiefly in the use of such tactics. If they have been profitable, even temporarily, the fact is by no means visible to the naked eye. As seen by that organ, the Republican record appears likely to embarrass not so much the President as the future of the party itself.

Inherent in the Roosevelt recovery programme there is one weakness so

conspicuous that the administration has sought rather to justify than to deny it. That is its cost. With the national debt climbing above its early post-war peak, with one extraordinary outlay leading to another, one might reasonably expect the opposition to take its stand in an impassioned defense of Treasury and taxpayer. From such a point of vantage, it could eventually launch a massed attack against governmental extravagance with the promise of considerable popular support. Republican spokesmen have fired a few stray shots in that direction, and Colonel Fletcher's inaugural suggests that the artillery will be unlimbered as November approaches.

Quick to sense this weakness, the President took prompt measures to repair it as best he might. His best was heroic, the results electrifying. The celebrated Economy Act did more than bolster the government's credit at a critical moment; it did more than dislodge seemingly impregnable abuses. It disarmed the opposition, destroyed much of its ammunition, and so effectively postponed any attack in force. Moreover, it set a rather obvious trap, into which the Republicans have obligingly fallen.

Perhaps they were betrayed by their own annoyance. It seems more probable that they were beguiled by the lure of quick profits. If they listened at all to the dictates of strategy, it was only to ignore them. If petty tactics violated these dictates, so much the worse for strategy. The course they pursued was at least touched with magnificence in its colossal disregard of consequence to party or nation.

Forgetting the indicated defense of Treasury and taxpayer, they grasped the first promising opportunity to attack the economy measures themselves. With a positive genius for seizing and waving the tattered shreds of discredited banners, they fought to restore the

abuses and expenses which the President had cut down. Senator Reed (now brazenly denouncing the 'orgy of spending' and calling upon the President to 'think of the country as a whole') became the great and good friend of the veterans' lobby. Magically, his associates rallied to his side. Intoxicated at finding an issue which could restore to their scattered forces a temporary unity, — which could even attract deserters from the President's camp, — they swept on to a fatal victory. The President's veto, promptly interposed, gave them one last chance of redemption. It was a real chance. It so happened that the vote of any one of the thirty-two Republican Senators present would have saved the day for economy and pension reform. The thirty-two Republican votes were cast solidly against economy and pension reform.

This stirring exhibition of party discipline in behalf of the 'special interests' gives to the American people one of its few opportunities for appraising the quality of the opposition's leadership. It may be rewarded by a few cheap votes, but no inconsiderable number of the veterans themselves may be counted on to prefer Mr. Roosevelt's courage. It is entitled to all the satisfaction it can derive from a minor victory which impairs the prestige of the President's hitherto unbroken success. A more costly victory, however, would be hard to conceive. Strategic advantage was sacrificed, consistency was sacrificed, all claim to popular confidence was sacrificed. The party was left in a position which, for an opposition that means business, is clearly untenable; upon any attempt to resume its previous post of vantage the Democrats can direct a withering fire. Meantime, how is Colonel Fletcher to swing his anti-extravagance guns into action without raking his own troops?

It is not easy to take seriously the other activities of a party that seems bent on discrediting itself. On the AAA front, which is certainly not invulnerable, capricious nature has proved itself a valuable Republican ally. So has the belief, said to be sweeping portions of the West, that the drought was a divine visitation in punishment of agricultural birth-control. Of such natural or supernatural aid the party has made little constructive use. Certainly it has done nothing to redeem its own conspicuous failure to solve the farm problem; for the admittedly dubious experiments which have ensued it offers no convincing substitute.

Against the NRA, Mr. Borah and Mr. Nye have, to be sure, made vigorous sallies in behalf of the small business man. The majority of their associates, however, seem reluctant to embark upon so quixotic a crusade. Perhaps they are hampered by a pedestrian imagination. Perhaps they cannot quite visualize the G. O. P. genuinely aroused and reunited through contemplating the plight of small business. So far at least as his party associates are concerned, it looks as if Mr. Borah would have to fight another lonely battle.

In undertaking his task, it is to be hoped that the Senator will divest himself, so far as possible, of other cares and preoccupations. His occasionally expressed concern to know what the administration is doing to collect the war debts, for example, might properly be left to his veteran colleague from the Pacific, who has done such yeoman service in preventing their reduction or collection. The Senator could then devote his admittedly superior talents to devising the formula which small business undoubtedly needs if it is to be saved. Incidentally, he might find the nation readier than certain of his party associates to welcome such a formula.

V

But the really damaging sins, I have always felt, are the sins of omission. One can make allowances for blunders in action. If a party is willing, a little experience in the school of opposition can do wonders. And if the Republicans continue to demonstrate their want of experience, the American people will doubtless arrange to extend their education indefinitely.

One ought, in fairness, to admit that seasoned veterans of opposition would have found much that was discouraging in the outlook a year ago. Not only was the G.O.P. left stunned and lame by its dizzy fall from grace. It awoke to a world whose face was altered. As Mr. Berle has brilliantly pointed out, ancient shibboleths and sanctions had been swept away, familiar premises discredited, a whole system of ideas undermined. We wanted no mere restoration; we wanted at the least a drastic renovation, while many insisted that nothing short of drastic innovation would serve. It was uncertain how far the administration would be content with renovation, how far it was prepared to go with innovation. It was certain only that it was on its way. As specialists in the *status quo*, the Republicans would naturally find all this disconcerting. One does not blame their initial confusion. It is the persistence of their confusion, their want of generalship, their generally irresponsible attitude, that condemn them. Everyone who sulks in his tent is not an Achilles.

There could have been no objection to an honest policy of watchful waiting. Indeed, during the first few months of a new administration, such a course is normally indicated. The government has a fresh mandate; its programme must have its chance to unfold, and during that period an actively hostile opposition would be unsporting and

unwise. This was preëminently true of the early months of the New Deal. But watchful waiting calls for the utmost alertness. Careful scrutiny is not synonymous with attack.

As the new programme unfolds, it gives rise to questions of public importance. Are its provisions reasonably consistent with each other? Are they well calculated to realize their announced purposes? What are their less obvious implications? And what is their price?

An opposition which gives to such questions no intelligible answers, or only a confused babel of partisan answers, is little more than a public charge. This is a general truth; it is peculiarly pertinent to-day. If ever government needs to sift and test its propositions, it is when they involve, or purport to involve, innovations. It is not that innovations need to be feared as such, though the best seldom suffer from a little critical examination. More important is the need to satisfy oneself that proposed innovations are really new, and not some forgotten expedient long since tried and found wanting. Such 'innovations' may in fact be only reactionary.

VI

Take the Roosevelt monetary policy. Dollar devaluation was doubtless wise and necessary. If its advantages can be exaggerated, so can its dangers. Even in supporting it, however, it is well to be aware of its implications. For example, it establishes a precedent for currency manipulation which may in the future be invoked not only when it is economically, but also when it is politically, desirable. It gives fresh political importance to an issue which, during much of our history, has racked the government, split parties wide open, and arrayed section against section.

Perhaps this was unavoidable. Perhaps the price had to be paid in order to avert more certain and immediate catastrophe. It is a singular fact, however, that the only memorable protest, the really arresting challenge, came not from a Republican, but from the President's friend and admirer, the senior Senator from Virginia.

But if the so-called Inflation Act, as an emergency measure, deserved special treatment, the Gold Reserve Act of 1934 scarcely falls within that category. On its face, this measure provided, as it should, that the profits of devaluation should go to the Treasury. It proceeded not only to withdraw gold coin from circulation, but to vest in the government title to all gold, including that held by the Federal Reserve System as public trustee. Finally, with the proceeds of devaluation, it set up a Stabilization Fund of two billion dollars, under virtually exclusive Treasury control. All this is sweeping enough, but what of the less obvious implications? Let us examine only one.

The powers conferred upon the Secretary with respect to use of the Stabilization Fund place in his hands, quite incidentally, a power to influence credit which substantially parallels that of the Federal Reserve, and so potentially cancels the latter's. However wisely this power may be used, however the inherent contradiction may yield to coöperation, no Act which creates it can escape the charge of being essentially reactionary. While prior to 1933 no one man in American history has ever possessed such a concentration of powers over credit, other Secretaries of the Treasury have attempted (before Congress established the Reserve System) to regulate its volume and distribution through manipulation of the public funds. In the absence of other constituted authority,

there was something to be said for such a policy.

The result, however, has generally been a storm of protest. On October 4, 1906, for example, the *Nation* warned that Theodore Roosevelt's Secretary of the Treasury, in pursuing this course, might arbitrarily 'throw deposits into the banks at a time when they would merely encourage a dangerous stock speculation; he might refuse to release funds when disaster to the money market would be the consequence.' It charged that his attempts at equitable distribution were proving to be a boon to speculators. A fortnight later the same journal found this gentleman's proposal that he be clothed with authority to shift at will the requirements for banking reserves explainable only 'on the supposition that the Secretary has confused himself with Providence.' Even if these criticisms were warranted, the panic of 1907 can be adequately explained on other grounds.

It is certain, however, that dissatisfaction with such arrangements was a powerful factor in the agitation for reform which culminated under Wilson, with the support of Bryan, in the passage of the Federal Reserve Act. The essence of this Act was the establishment of a monetary authority whose central board is appointed neither by the Treasury nor by the banks, but by the President, by and with the advice and consent of the Senate. Since appointments run for ten years, this central board is protected against arbitrary executive interference; since there is a vacancy every second year, its membership tends to reflect the deeper shifts in public opinion. Substantially insulated from 'politics,' it is subject only, as it should be, to the legislative control of Congress.

Now if the control of credit is to be disinterested, if it is to be exercised

with an eye single to the public interest, this principle is of the utmost importance. All human agencies make mistakes, but a political agency, however good its intentions, is not the agency for doing such a job. Against violent political pressure, the Treasury's defenses are inherently weak. Restriction of credit is often imperative and never popular. Against the inevitable repercussions of such a policy, the Federal Reserve provides government with a useful cushion. Without it, it may be doubted whether an administration could survive a deliberate policy of credit restriction. But survival is virtually the first law of government. It follows, therefore, that, faced with the urgent need to restrict, your purely political machinery for controlling credit simply breaks down. Nor could the Secretary be expected to operate such a mechanism without being primarily concerned with the needs of the Treasury. It is his job, particularly when faced with the necessity for heavy public financing, to maintain the market for government bonds. But if the sale of government bonds on a large scale becomes necessary to prevent credit from getting out of hand, what is he to do? Clearly it is unwise and unfair to impale any man upon the horns of such a dilemma.

If any such dangers are implicit in the Gold Reserve Act, it is of some importance that the public should know about them. An opposition unable to eliminate them should at least see to it that they are clearly understood. As a matter of fact they were pointed out last January, but not by the Republican Party. Certain individual Republicans did evince a rather vague concern about the bill, but it is primarily to Mr. Glass and a small group of Democrats that it owes such safeguards and limitations as it finally contained.

The President, one ought to add, was quick to disclaim any intention to cripple the Federal Reserve or to make of the Treasury a central banking institution. An alert opposition might well have welcomed this statement, while regretting that the provisions of the bill should not be more consistent with it. It might have suggested that such inadvertent inconsistency did little credit to the administration's draftsmanship, and offered to repair it. As it is, the inconsistency is perhaps less a reflection upon the administration than upon a Congressional opposition which failed to observe it.

VII

Fundamental to democracy is the proposition that government must not only guard but be guarded against overreaching. As the powers and activities of government multiply, the exercise of that vigilance which is the price of liberty becomes a full-time job. The New Model Congress is a marvel for speed, but what about the controls?

A free press can and does do much, but the press speaks with many voices. Organized groups have their use, but they are generally subject to the not unwarranted suspicion of having an axe to grind. They represent the laborer or the manufacturer, the merchant or the farmer, the veteran or the taxpayer, the inflationist or the property owner. They are organized to demand government grants or promote a propaganda or defend a vested interest. To entrust the controls to them would be to turn over to the 'special interests' an important function of government.

Party responsibility is still an essential ingredient in the democratic state. It fashions a reasonably coherent programme out of conflicting demands. It is the people's insurance

policy in an uncertain and predatory world. And in curbing excess of zeal, in elucidating the facts, in bringing constructive criticism to a focus, and in developing alternative programmes, there is no substitute for an enlightened and well-organized party of opposition. That is why there is no room for it in the authoritarian state.

An enlightened and well-organized party implies responsible leadership. Lacking it, no majority party can safely assume power or long retain it. Lacking it, no minority party can effectively restrain power or earn the right to hold it. Why, then, should we expect it only of the administration?

The government, to be sure, has the most conspicuous opportunity. It tends to hold the centre of the stage, but if it monopolizes it, the opposition

has only itself to blame. Like the government, it has important public functions to perform. Like the government, it is responsible to the people for their performance. Like the government, it will do its job with conspicuous success only as it develops a party leadership strong enough to be effective, wise enough to be restrained, and intelligent enough to command respect. For such leadership there is always room near the centre of the stage.

Here at their very doorstep is the formula of salvation for which the Republicans have lately been scanning the heavens and the earth. By embracing it, the party would save itself and something far more important. It would establish a salutary precedent for all parties in opposition. It might, in time, even cease to be one.

THE DEADLY ARTS

BY HANS ZINSSER

I

I AM writing a book.¹ If it is ever written, and — if written — it finds a publisher, and — if published — anyone reads it, it will be recognized with some difficulty as a biography. We are living in an age of biography. We can no longer say with Carlyle that a well-written life is as rare as a well-spent one. Our bookstalls are filled with stories of the great and near-great of all ages, and each month's publishers' lists announce a new crop. The biographical form of writing has largely displaced the novel, it has poached upon the territory that was once spoken of as criticism, it has gone into successful competition with the detective story and the erotic memoir, and it has even entered the realm of the psychopathic clinic. One wonders what has released this deluge.

There are many possible answers. It is not unlikely that, together with other phases of modern life, literature has gone 'scientific.' As in science, a few men of originality work out the formulas for discovery in a chosen subject, and a mass of followers apply this formula to analogous problems and achieve profitable results. In an age of meagre literary originality, it is a natural impulse for workers to endeavor to explain the genius of great masters. And for every novelist, poet, or inventor of any kind we have a dozen interpreters, commentators, and critics.

¹Dr. Zinsser's paper forms a chapter of his forthcoming book, *Rats, Lice, and History*. — EDITOR

Once biography was a serious business and the task of the scholar. When Plutarch wrote his *Parallel Lives*, his mind — as Mr. Clough rightly remarks — was running on the Aristotelian ethics and the Platonic theories which formed the religion of the educated men of his time. He dealt less with action, more with motives and the reaction of ability and character upon the circumstances of the great civilizations of Greece and of Rome. Scholarly biographies of later ages followed similar methods, even in such intensely personal records as Boswell's *Johnson*, or the *Conversations* by which so dull an ass as Eckermann managed to write himself into permanent fame. The minor details of intimate life were, in the past, regarded as having consequence only as they had bearing on the states of mind that led to high achievement. It was recognized that '*les petites choses de la vie privée peuvent s'allier avec l'héroïsme de la vie publique.*' But they were utilized only when they were significant or amusing. All this, however, has changed. The new school sees the key to personality in the *petites choses*. Biography has become neurosis-conscious. Freud is a great man. But it is dangerous when a great man is too easily half-understood. The Freudian high explosives have been worked into firecrackers for the simple to burn their fingers. It has become easy to make a noise and a bad smell with materials compounded by the great discoverer

for the blasting of tunnels. Biography is obviously the best playground for the dilettante of psychoanalysis. The older biographers lacked this knot hole into the subconscious. They judged their heroes only by the conscious. The subconscious dethrones the conscious. Great men are being reappraised by their endocrine balances rather than by their performances. Poor Shelley! Poor Byron! Poor Wagner! Poor Chopin! Poor Heine! Poor Mark Twain! Poor Henry James! Poor Melville! Poor Dostoevski! Poor Tolstoy! And even poor Jesus! There are still a lot left — the surface is hardly scratched. But, even before the great ones give out, the 'damaged' ones make good reading: P. T. Barnum, Mrs. Eddy, Brigham Young — even unto Al Capone and Pancho Villa.

In the present biography, we are forced by the nature of our subject to revert to the older methods. We will profit by no assistance from psychoanalysis. There will be no prenatal influences; no Oedipus or mother complexes; no early love affairs or later infidelities; no perversions, urges, or maladjustments; no inhibitions by respectability, and no frustration by suppressed desires. We shall have no gossip to help us; no personal letters which there was no time to burn. We cannot count upon the *réclame* of a libel suit barely averted, or of scandals deftly hinted at. We have not even the comfort of preceding biographers and essayists whom we can copy, paraphrase, or refute. Indeed, we are quite stripped of the sauces, spices, and dressings by which biographers can usually make poets and scientists into quite ordinary and often objectionable people; by which they can divert attention from the work of a man to his petty or perhaps vicious habits; by which they can create a hero out of a successful commercial highbinder; by which they can smother public guilt by

domestic virtue, or direct interest from the best and lasting accomplishments of their subject to the utterly unimportant private matters of which he was ashamed.

The habitué of biographies will ask himself how, without these indispensable accessories of the biographical tradesman, we can dare to enter this field. The answer is a simple one: the subject of our biography is a disease.

We shall try to write it in as untechnical a manner as is consistent with accuracy. It will of necessity be incomplete, for the life of our subject has been a long and turbulent one from which we can select only the high spots. Much of its daily domestic history has been as commonplace and repetitive as that of any human being, warrior, poet, or shopkeeper. Above all, our narrative is not 'popular science.' We have before us the dreadful examples of Beebe, Julian Huxley, J. B. S. Haldane, de Kruif, Eddington, Jeans, and Millikan. If our story is, in places, dramatic, it will be the fault of the story — not our own. Nobody will be educated by it. We have chosen to write the biography of our disease because we love it platonically — as Amy Lowell loved Keats — and have sought its acquaintance wherever we could find it. And in this growing intimacy we have become increasingly impressed with the influence that this and other infectious diseases, which span — in their protoplasmic continuities — the entire history of mankind, have had upon the fates of men.

In approaching our subject, however, we permit ourselves a number of digressions into fields into which our undertaking inevitably forces us.

II

Infectious disease is one of the great tragedies of living things — the struggle for existence between different forms

of life. Man sees it from his own prejudiced point of view; but clams, oysters, insects, fish, flowers, tobacco, potatoes, tomatoes, fruit, shrubs, trees, have their own varieties of smallpox, measles, cancer, or tuberculosis. Incessantly the pitiless war goes on, without quarter or armistice — a nationalism of species against species. Usually, however, among the so-called 'lower' forms of life, there is a solidarity of class relationship which prevents them from preying upon their own kind by that excess of ferocity which appears to prevail only among human beings, rats, and some of the more savage varieties of fish. There are, it must be admitted, isolated instances in the animal kingdom of a degree of ferocity within the same species not yet attained by man. Husband eating is an accepted custom with the spiders, and among the Alacran or scorpions it is quite *de rigueur* for the mother to devour the father and then, in her turn, to be eaten by her 'kiddies.' When male members of the larger cat families — that is, mountain lions — waylay and eat their own children, this is not truly an evidence of ferocity. It is an indirect *crime passionnel*, the result of an impatient tenderness for the lioness who has become too exclusively the mother. The motive is love, and, as La Rochefoucauld has said, '*Si on juge l'amour par la plupart de ses effets, il ressemble plus à la haine qu'à l'amitié.*'

Nature seems to have intended that her creatures feed upon one another. At any rate, she has so designed her cycles that the only forms of life that are parasitic directly upon Mother Earth herself are a proportion of the vegetable kingdom that dig their roots into the sod for its nitrogenous juices and spread their broad chlorophyllic leaves to the sun and air. But these — unless too unpalatable or poisonous — are devoured by the beasts and by man;

and the latter, in their turn, by other beasts and by bacteria. In the Garden of Eden perhaps things may have been so ordered that this mutual devouring was postponed until death, by the natural course of old age, had returned each creature's store of nutriment to the general stock. Chemically, this might have been possible, and life maintained. But in the imperfect development of cohabitation on a crowded planet the habit of eating one another — dead and alive — has become a general custom, instinctively and dispassionately indulged in. There is probably as little conscious cruelty in the lion that devours a missionary as there is in the kind-hearted old gentleman who dines upon a chicken pie, or in the staphylococcus that is raising a boil on the old gentleman's neck. Broadly speaking, the lion is parasitic on the missionary, as the old gentleman is on the chicken pie, and the staphylococcus on the old gentleman. We will not enlarge upon this, because it would lead us into that excess of technicality which we wish to avoid.

The important point is that infectious disease is merely a disagreeable instance of a widely prevalent tendency of all living creatures to save themselves the bother of building, by their own efforts, the things they require. Whenever they find it possible to take advantage of the constructive labors of others, this is the direction of the least resistance. The plant does the work with its roots and its green leaves. The cow eats the plant. Man eats both of them; and bacteria (or investment bankers) eat the man. Complete elucidation would require elaborate technical discussions, but the principle is clear. Life on earth is an endless chain of parasitism which would soon lead to the complete annihilation of all living beings unless the incorruptible workers of the vegetable kingdom constantly renewed the supply of suitable nitrogen

and carbon compounds which other living things can filch. It is a topic that might lend itself to endless trite moralizing. In the last analysis, man may be defined as a parasite on a vegetable.

That form of parasitism which we call infection is as old as animal and vegetable life. And our chief purpose in writing the biography of one of these diseases is to impress the fact that we are dealing with a phase of man's history on earth which has received too little attention from poets, artists, and historians. Swords and lances, arrows, machine guns, and even high explosives have had far less power over the fates of the nations than the typhus louse, the plague flea, and the yellow-fever mosquito. Civilizations have retreated from the plasmodium of malaria, and armies have crumbled into rabbles under the onslaught of cholera spirilla, or of dysentery and of typhoid bacilli. Huge areas have been devastated by the trypanosome that travels on the wings of the tsetse fly, and generations have been harassed by the syphilis of a courtier. War and conquest and that herd existence which is an accompaniment of what we call civilization have merely set the stage for these more powerful agents of human tragedy.

III

Having written the preceding paragraphs, we read them over and came to the conclusion that there was little in them that mattered very much. We were, perhaps, a little severe in discussing modern biographers. One is lured into discussions of this kind by one's irritations. One can disagree with many of the opinions expressed by Goethe in Eckermann, or by Renan, or Sainte-Beuve, or by Babbitt, or by Whitehead, — when one understands what he is talking about, — and come away with the satisfaction of having

been stimulated to opposed views by the importance of those one disagreed with. But one is merely irritated by the complacency with which the sciences and the arts are dealt with *e superiore loco* by the younger school of American biographical critics, who sit between intelligence and beauty, — like Voltaire between Madame de Staël and Madame Récamier, — 'without possessing either.' One wishes to exclaim, with a similarly irritated Frenchman: 'Save us, dear Lord, from the *connaisseurs qui n'ont pas de connaissance* and from the *amateurs qui n'ont pas d'amour!*'

A part of our first paragraphs, therefore, is nothing more than a growl. Yet it still serves to introduce our subject; and we are further inclined to retain it for the following reasons. We are engaged in an occupation which philosophers, mathematicians, physicists, physical chemists, biochemists, and even physiologists (who may in many cases have been less valuable to science than one of Pawlow's dogs) do not acknowledge as a science, and which poets, novelists, critics, biographers, dramatists, painters, sculptors, and even journalists categorically exclude from the arts. We are in a position, therefore, to look both ways with the clarity begotten of humility. But, in discussing our ideas with representatives of the various callings named above, we encountered a common misconception, — perhaps the only opinion on which there was agreement, — to the effect that men were impelled to enter the career of investigating infectious diseases from a noble desire to serve mankind, to save life, and to relieve suffering.

A friend of ours is a professional writer. By this, we mean a person who makes his living by writing in the same way that a bricklayer makes his by laying bricks, or a plumber supports himself by sweating joints. Writing, of

course, like speech, is a method of expressing ideas or of telling tales. It is also a means of conveying to others emotions, conceptions, or original comprehensions which might instruct, amuse, delight, or elevate. This kind of writing used to be called art. And once — when only the intelligent could read — writing also needed to be intelligent and artistic.

In our day, however, all kinds of people can read: college professors and scrubwomen, doctors and lawyers, bartenders, ministers of the gospel, and trained nurses. They all have the same ideal of the happy ending of a dull day — a comfortable couch, a bed lamp, and something to read. And there must, in consequence, be writers to supply this need — literature for the intelligent as for the moron — a book for every brain, like a motor car for every purse.

The particular writer of whom we speak has been unusually successful in alternately supplying both markets — now satisfying the reasonably intelligent, and again luring a fat check with stories about the poor boy and the boss's daughter. In the latter mood, he has scented the rich possibilities of exploiting the sensationalisms of science — a source of revenue so successfully tapped by a number of his literary contemporaries. But never having had any close association with workers in the field of infectious diseases, he shared this misconception of the noble motives which impelled these queer people. And not quite understanding how anyone could be impelled by noble motives, he asked us: 'How do bacteriologists get that way?' We answered his question more or less in the following manner.

A great deal of sentimental bosh has been written about this totally erroneous assumption. When a bacteriologist dies — as other people do — of incidental dissipation, accident, or

old age, devotion and self-sacrifice are the themes of the minister's eulogy. Let him succumb in the course of his work, — as an engineer falls down a hole, or a lawyer gets shot by a client, — he is consecrated as a martyr. Novelists use him as they formerly did cavalry officers, Polish patriots, or aviators. If an epidemiologist on a plague study talked and behaved in the manner of the hero of *Arrowsmith*, he would not only be useless, but would be regarded as something of a yellow ass and a nuisance by his associates. And de Kruif is far too intelligent a man not to have known, when he wrote his thriller on *Men against Death*, that raucous laughter would be its reception in the laboratories and in the field where the work he describes is being done.

As a matter of fact, men go into this branch of work from a number of motives, the last of which is a self-conscious desire to do good. The point is that it remains one of the few sporting propositions left for individuals who feel the need of a certain amount of excitement. Infectious disease is one of the few genuine adventures left in the world. The dragons are all dead, and the lance grows rusty in the chimney corner. Wars are exercises in ballistics, chemical ingenuity, administration, hard physical labor, and long-distance mass murder. Ships have wireless equipment. Our own continent is a stage route of gas stations, and the Indians own oil wells. Africa is a playground for animal photographers or museum administrators and their wives, who go there partly to have their pictures taken with one foot on a dead lion or elephant and disgusted-looking black boys carrying boxes of champagne and biscuits on their patient heads. Flying is adventurous enough, but little more than a kind of acrobatics for garage mechanics, like automobile racing. But, however secure and well-

regulated civilized life may become, bacteria, Protozoa, viruses, infected fleas, lice, ticks, mosquitoes, and bed-bugs will always lurk in the shadows ready to pounce when neglect, poverty, famine, or war lets down the defenses. And even in normal times they prey on the weak, the very young, and the very old, living along with us, in mysterious obscurity waiting their opportunities. About the only genuine sporting proposition that remains unimpaired by the relentless domestication of a once free-living human species is the war against these ferocious little fellow creatures, which lurk in the dark corners and stalk us in the bodies of rats, mice, and all kinds of domestic animals; which fly and crawl with the insects, and waylay us in our food and drink and even in our love.

IV

We shall now discuss the relationship between science and art — a subject that has nothing to do with typhus fever, but was forced upon us by the literary gentleman spoken of in the last section.

What follows will be received with contemptuous shrugs by the professionally literary. There is a prejudice in America that specialists should not trespass beyond their own paddocks, however interestedly they may look over the rails. But literary critics are constantly telling us that science is this or that — ‘science should not be exalted out of its place,’ and so on; and since we cannot possibly know less about literature than most of these gentlemen know about science, we venture to proceed, hoping that Messrs. Edmund Wilson, Van Wyck Brooks, Mumford, Max Eastman, and others who were the ‘Younger School,’ until they grew middle-aged, will skip this part of our discussion.

The biologist is in a peculiarly diffi-

cult position. He cannot isolate individual reactions and study them one by one, as the chemist often can. He is deprived of the mathematical forecasts by which the physicist can so frequently guide his experimental efforts. Nature sets the conditions under which the biologist works, and he must accept her terms or give up the task altogether.

He knows that physicochemical analysis will never give the final clue to life processes; yet he recognizes that ‘vitalism’ and ‘neovitalism’ are little more than a sort of amorphous theology born of a sense of the helplessness of mere ‘mechanism.’² So the patient biologist plods along, piling up his empirical observations as honestly as he can — getting what satisfaction he may from the fact that he is helping, by infinite increments, to reduce the scope of vitalistic vagueness to narrower and narrower limits. As Bergson puts it: ‘A very small element of a curve is near being a straight line; and the smaller it is, the nearer. . . . So, likewise, “vitality” is tangent, at any and every point, to physical and chemical forces. . . . In reality [however], life is no more made up of physicochemical elements than a curve is composed of straight lines.’ The biologist is constantly differentiating the curve of vitality, quite aware that mankind can approach but never reach the ‘limiting value’ of complete comprehension. Moreover, he knows — whenever he attacks a problem — that before he can advance toward his objective he must first recede into analysis of the individual elements that compose the complex systems with which he is occupied.

Such difficulties engender a habit of mind that has hampered us in the present undertaking. We approached

² And, indeed, ultimately they both encounter the same inevitable perplexity, since, as Paley rightly asserts, mechanism presupposes God as the mechanician. This is the difficulty faced by all the recent astronomical and physicist school of ponderers. — AUTHOR

the writing of the biography of typhus fever with the careless confidence which always accompanies the first conception of an experimental objective. We were first deflected into contemplation of the general methods of biographical writing; then arose the question why men occupied themselves with the study of disease. We thought we were through with preliminaries, when our literary friend dropped in again, and proceeded to scatter salt upon our enthusiasm.

'How,' he said, 'can a person who has spent his life cultivating bacteria; inoculating guinea pigs, rabbits, mice, horses, and monkeys; posting about the dirty corners of the world in the study of epidemics; catching rats in foreign cellars; disinfecting, delousing, fumigating; looking at rashes, down throats and into other apertures of man and animals; breeding lice, bedbugs, fleas, and ticks; examining sputum, blood, urine, stools, milk, water, and sewage — how,' he repeated, 'can such a person, who is not quite a scientist and nothing of an artist, presume to undertake a task which no one not an artist could successfully accomplish? You might be right about the keyhole biographers and the pasteurized Rabelaisian school of Freudian critics, but is that any worse than the literary-scientific spinster movement? Do you want to be like Dr. Collins of New York, "the-Doctor-looks-at-this, the-Doctor-looks-at-that" business?'

'But!' we replied —

'Look at all the rest of the middle-aged scientists who have made fools of themselves dabbling with art. Read the *Atlantic Monthly*. Do you want to be like Beebe or Julian Huxley?'

'Good Lord,' I said, 'one need n't stop being a bacteriologist just because one takes an intelligent interest in other things! Here in America we seem to expect a specialist to become a sort of Taylorized factory worker. Why should

a man look at the world through only one knot hole?'

'Oh, look through a dozen or climb up and look over the fence if you like. But keep still about things you're not trained to handle. Biography is a job for an artist. Stick your head out of your laboratory window and watch the world go by. But if you want to write, pull it in again and write for the *Journal of Experimental Medicine*. You'll only end, if you keep this up, by losing what little reputation you've got.'

'But,' we demurred, 'is a man to be denied an intelligent appreciation of art just because he knows something about a science? Is literature to be appraised only by those who have time to read after breakfast? What's the essential difference between art and science anyway?'

'That's a difficult question,' he said. 'Goethe might have answered it, but he did n't think it was worth while. The late war between the humanists and anti-humanists might have brought an answer — only both sides were so angry at each other and so ignorant of science that they neglected the main issue. Babbitt, with his vast erudition, might have found a reply if he had lived. Toward the end, the small fry were keeping him too busy with his heels. Anyway, neither you nor I know enough to deal with it.'

Our friend's opinions on matters of this sort have always carried much weight with us, and, in this case, they impelled us to delay embarking upon our project — which, as he said, transcended our scientific training — until we had given thought to the essential differences, if there were any, between science and art.

We approached the problem modestly by examining the opinions of others, and found that men far wiser than ourselves had failed to agree. Eddington and Jeans incline to limit science to the 'metrical or mathe-

matical descriptions of phenomena,' a conception which would exclude even the biological branches of learning. But, having ascended to these cold heights by laborious upward paths of reason, they sit down in their metaphysical toboggans and swish back into the warm and comfortable vales of theology. Dingle attempts a more liberal view, defining science as a method of 'dealing rationally with experiences which have a certain quality; namely, that they are common to all normal people.' This is dreadful English, but — once parsed — it means, conversely, that the territory of art is that of experiences which are 'peculiar to the individual, or perhaps shared by a limited number of others.' This opinion is much like the pre-Darwinian method of classifying animals by their superficial similarities, which made the whale a fish and the bat a bird. Whitehead penetrates more deeply beneath the mere morphology of the problem into its comparative anatomy and physiology. He includes, in the category of science, the biological branches and geology, and, more than that, he regards naturalistic art (Leonardo) as closely akin to science. Indeed, he finds in great literature — for instance, in the 'scientific imagination' of Æschylus, Sophocles, and Euripides, in their visions of Fate 'urging a tragic incident to its inevitable issue' — the same principle of 'Order' which is the 'vision possessed by science.' If Aristotle could return to us long enough to familiarize himself with modern scientific thought, we venture to say he would come pretty close to agreeing with Whitehead. Incidentally, what a 'kick' Aristotle would get out of Harvard!

That any sharp separation between science and art is impossible was also in the mind of Havelock Ellis, when he wrote the following passage: 'To press through, to reveal, to possess, to direct

and to ennoble, that is the task and the longing alike of the lover and the natural discoverer; so that every Ross or Franklin is a Werther of the Pole, and whoever is in love is a Mungo Park of the spirit.' We should have taken more pleasure in this quotation had Mr. Park's Christian name been other than 'Mungo.' But, as it stands, it expresses the burden of the thought that was developing in our own mind.

V

To most of the modern literary critics — probably because of their almost incredible ignorance of scientific thought — the so-called scientist is a 'mere rationalist,' and science is held, in respect to art, as photography is to painting. This separation on the basis of precision is utterly untenable. Science is not a whit more photographic than is art. Measurements and formulations are, even in the so-called exact — the physical — sciences, not much more than reasonably accurate approximations. Scientific method is again and again forced to employ abstract conceptions, irrational numbers like $\sqrt{2}$ and $\sqrt{3}$, the line without breadth, the point without volume, zero, the negative quantity, or the idea of infinity. And scientific thought continually sets sail from ports of hypothesis and fiction, advance bases of the exploring intellect. Matter becomes molecules, molecules become atoms; atoms, ions; ions, electrons; and these, in their turn, become uncomprehended sources of energy — not more clear as seizable reality than the poet's conception of the 'soul,' which he knows only from its 'energy' — the yearnings, delights, and sorrows which he feels. The history of science is full of examples of what, in art, would be spoken of as inspiration, but for which Whitehead's definition, 'speculative reason,' seems much more appropriate.

It is only too painfully obvious, moreover, that neither the scientist nor the artist is ever a 'creator.' The word 'creative,' so incessantly misused by our younger critical school, is a fiction of that optimism about human achievement which — it has been said — thrives most vigorously in lunatic asylums. Nature, as Goethe puts it, runs its course by such eternal and necessary principles that even the gods themselves cannot alter them. The most that the scientist and the artist accomplish is new understanding of things that have always been. They 'create' a clearer perception. They are both, in this sense, observers,³ the obvious difference being that the scientist impersonally describes the external world, whereas the artist expresses the effects which external things exert upon his own mind and heart. In both cases, the more generally applicable the observations, the greater is the science or art.

Would it not be fair to say that an achievement of observation becomes science or art according to the degree to which its comprehension calls upon perception by the reason or by the emotions, respectively? The capacities of intelligence form a sort of spectrum which extends from what we may call an infra-emotional to an ultra-reason

³ I. A. Richards expresses this function of the artist as an observer of the 'facts' of human emotions in a precise manner when he says, 'In the arts we find the record, in the only form in which these things can be recorded, of the experiences which have seemed worth having to the most sensitive and discriminating persons.' In this sense Leonardo, Shakespeare, Cervantes, Goethe, Dostoevski, and countless other artists were as truly accurate observers in the field of human experience as were Newton and Pascal in the field of the external world. André Gide means the same thing when he says, 'Everything has always existed in man . . . and what new times uncover in him has always slumbered there. . . . How many hidden heroes await only the example of a hero in a book, only a spark of life given off by his life in order to love, only a word from him in order to speak.' — AUTHOR

range. At the infra-emotional extreme lie the perceptions set in motion by music and by lyrical poetry. At the opposite end — that of pure reason — is placed the perceptive capacity for mathematics. Between the two there is a wide range of overlapping where art is scientific and science artistic. Literature in the sense of prose may be taken to hold a middle ground, shading on the left into epic and narrative poetry and, on the right, through psychology, biology, and so forth, toward mathematics.

'What happens when you go off the deep end on either side?' asked my friend.

'Well, beyond the 10⁻¹⁰ range experience seems to show that the end organs give out and the physicist joins the church; whereas on the other side, as I should judge from Joyce, Gertrude Stein, and their imitators, the spinal cord begins to horn in on the brain. In either case it ceases to be science or art.'

VI

I continued the discussion with my friend at our next meeting.

'On that basis,' he said, 'it should be easy to classify any performance by a sort of intellectual spectroscopic analysis.'

'With the older forms it was usually easy to fit them into their proper places in the spectrum. Critics like Coleridge or Sainte-Beuve needed to concern themselves only with style, beauty of diction, clarity of thought, intensity, sincerity, depth, and the qualities of taste and sensitiveness which, while vague and subtle, were still within the scope of the underanged mind. Art could be judged by any informed and intelligent critic without recourse to border-line psychiatry. The corner was turned by the French symbolists — who followed Baudelaire, Rimbaud, Verlaine, Mallarmé, Laforgue. On

occasion these great men came close to the jumping-off place of uncomprehensibility. But in the main they achieved a great beauty by the very dusk and mist through which their thoughts, sufferings, and joys were mysteriously, grotesquely, vaguely, but still effectively perceived. One cannot, with Laserre, deny them their just places merely because they applied their superb gifts to *tristesse* and *laideur*. We make no plea for a return to Tennysonism or the Longfellow era, but had Sainte-Beuve been required to pass judgment on certain passages of T. S. Eliot, the later Joyce, or Gertrude Stein, he would surely have gone into consultation with Charcot or Bernheim, a dilemma which our modern critics seem to admit — in their judgments of modern work — by their habitual appeal to Sigmund Freud. It is, of course, difficult, even in medical practice, to survey sharply the line between sanity and border-line derangements. But when the critic of a work of art needs psychiatric training this fact alone would serve to throw suspicion on the artistic value of his subject. The real difficulty of applying our kind of spectroscopic analysis to much of the modern stuff lies in the fact that a good deal of it lacks the rationality of science without possessing the emotional appeal of art.

'Let us examine some of it. Take T. S. Eliot — who, in his prose, shows great clarity of thought and to whom no one will deny talent, originality, and, on occasion, great beauty. But in much of his poetry he plays, as has been aptly remarked, a guessing game with readers, whom he seems to appraise, apparently with some reason, as imbeciles. "Guess which memory picture of my obviously one-sided erudition I am alluding to? See note 6a." Then he drops suddenly, after a few lines of majestic verse, into completely irrelevant babble.

'In the room the women go to and fro
Talking of Michael Angelo.

One is tempted to add, "Eenie, meenie, minie, mo." Or this: —

'Madame Sosostri, famous clairvoyante,
Had a bad cold, nevertheless
Is known to be the wisest woman in Europe
With a wicked pack of cards.

'Why "nevertheless"? Was she wise *because* she had a bad cold? Or this (one has the choice of innumerable passages): —

'Now Albert's coming back, make yourself a bit smart.
He'll want to know what you done with that money he gave you
To get yourself some teeth.

'Is that poetry? It sounds like trivial prose. It certainly is n't science.'

'Of course it's not fair to take things out of their contexts like that. The thing as a whole symbolizes the Waste Land of modern disillusionment. Of course it's hard for a scientist to understand.'

'It's not whether a thing is hard to understand. It's whether, once understood, it makes any sense. Every now and then my monkeys get loose in the laboratory and achieve brilliant and bizarre effects by smashing bottles of colored liquids against microscopes and Bunsen burners. The result is a stimulating chaos of lights, sounds, and excitements. But when they get through there's nothing left but disorder and litter that has to be swept up before orderly scientific work can be resumed. You can do the same thing with the workshops of art. What I don't understand is why a man of such obvious power will do that sort of thing.'

'I suppose you will say the same thing about Baudelaire?' he said.

'Oh, dear, it's the old stuff that these people derive themselves from Baudelaire and Rimbaud and Laforgue. But those men were making

discoveries. Baudelaire was an organic chemist. He synthesized extraordinarily repulsive but new compounds. But incoherence and a bad smell don't make a Baudelaire.'

'Well, let's try another; perhaps you recognize this one?

'Nearly all of it to be as a wife has a cow. All of it to be as a wife has a cow, all of it to be as a wife has a cow, a love story. As to be all of it as to be a wife as a wife has a cow, a love story, all of it as to be all of it as a wife all of it as to be as a wife has a cow a love story. . . .

or

'A meal is mutton mutton why is lamb cheaper, it is cheaper because so little is more.'

'That's Gertrude Stein,' I said, 'but listen to this one: —

'Balloons — colored balloons — my colored balloons — Who busted my balloons? Bolony balloons; they have punctured my categorical imperative.'

'I don't seem to remember that in her writings,' he replied.

'No, that is n't Gertrude Stein. That's Alice Gray, whom I knew in the McLean Hospital. She was fifty, but she imagined she was a baby. Listen to another: —

'Pease porridge hot, pease porridge cold,
Pease porridge in the pot . . .'

'You're only trying to be funny,' he interrupted me. 'As a matter of fact, Gertrude Stein can write quite sensibly when she wants to.'

'Why does n't she?' I asked.

'She's practising automatic writing.'

'Then it's science.'

'Oh, no — she is creating an impression by an alternation of conscious and subconscious explosions.'

'Then it's art — in the sense of fireworks.'

'See Skinner in the *Atlantic Monthly* for January 1934. — AUTHOR

'But she's had an immense influence on younger writers,' he said.

'So have Mrs. Eddy and P. T. Barnum,' I replied. 'Without Baudelaire there might not have been a Rimbaud or a Verlaine. Without Buffalo Bill, P. T. Barnum, or Mrs. Eddy there might have been no Gertrude Stein and Joyce might have continued to write distinguished prose.'

'Speaking of Joyce,' he said, 'have you tried "Tam and Sham" or whatever their names are? Listen!

'Eins within a space and a weary wide space it wast, are wohnd a Mookse. The onesomeness wast all to lonely, archunsit-like, broady oval and a Mookse he would a walking go (My hood! cries Antony Romeo). So one grand summer evening after a great morning and his good supper of gammon and spittish, having flabelled his eyes, pilloled his nostrils, vacticanated his ears . . .'

'Stop!' I cried. 'I got a licking for that sort of thing when I was a little boy.'

'Is it science or art?' he asked.

'Neither, of course,' I said. 'But what puzzles me still is why they do it. It would be too easy to dismiss the matter by assuming that they were mildly crazy. Moreover, the ability of the ones we have mentioned to return, at will, to the rational state excludes this.'

'You forget,' he said, 'the idea of Poesie Pure — the less it means, the better; the approximation of poetry to music of Walter Pater and of Moore.'

'The relationship of poetry to music has also come in for a great deal of learned twaddle. Valéry says the poet is merely a sort of musician. Wyndham Lewis calls it "critical mysticism." They speak a lot (Brémond) about the "summons from within," the "weight of immortality upon the heart," poetry which "goes further than the word which expresses it," and so forth.

Sometimes the critic goes much further in his mysticism than the poets he writes about.'

Incidentally it is a curious phenomenon that some of the great scientists, when they become critics and are caught in efforts to explain their own æsthetic reactions to poetry, become almost as mystical as the literary analysts. Occasionally a man's authority is so great — in most particulars rightly so — that to criticize him is, in the eyes of the learned world, like spelling God with a small *g*. I refer to Whitehead, and in disagreeing with him I feel much like a Neanderthal man attacking a mastodon with a bean-shooter. When he discusses the application of Clerk Maxwell's equation to the interior of the atom, he has me on my back. But when he begins to attribute reference to some form of Kantian, Berkeleyan, or Platonic idealism to Shelley in his poem on Mont Blanc, or derives Wordsworth's nature worship from a 'criticism of science,' he merely reveals his own inability to take his foot off the brake of reason and coast freely with the emotions.

Now, when Shelley writes about the cloud or about Mont Blanc, he is not thinking of the 'elusive endless change of things,' nor is he consciously refusing 'to accept the abstract materialism of science.' He is expressing in magnificent images the thoughts and emotions that are aroused in him by the nature he views; and no amount of philosophical analysis can give the reader Shelley's full effect. The sheer beauty of the shifting thoughts and feelings, and the musical beauty, — not only musical in sound, but in the harmony of images as well, — must arouse in the reader the same reaction, transmitted from the poet, which nature aroused in the poet himself. It is the old question that Shelley himself answered by saying: 'To analyze a work of art into its elements is as

useless as throwing a violet into a crucible.'

Of course, poetry approaches music, but, unlike music, it has the power of concreteness in thought and imagery. The greatest poetry is communication, and is clear. It may, through pure lyricism, progress sanely to the symbolism of Mallarmé and his contemporaries, growing less and less intellectually clear — more and more dependent upon imagery and suggestion. When it goes beyond that, it may come to the deep end where it tries to be purely saxophonic, as in the 'jug, jug, jug,' or the 'bam boo bim bam tree' gibberish in certain passages of Mr. Eliot. Baudelaire had this in mind when in *L'Art Romantique* he said that 'there are subjects which belong to painting, others to music, others to literature,' and '*Est-ce par une fatalité des décadences qu'aujourd'hui chaque art manifeste l'envie d'empiéter sur l'art voisin?*'⁵ When a work of literature, even if it is written in short, capitalized lines, becomes utterly incomprehensible to the sane and sensitive, it has gone off the deep end.

VII

Why, we must ask ourselves, have individuals of unquestionably great powers chosen to play with their minds like captive monkeys with their geni-

⁵ It is pertinent, in this connection, to ask oneself what would have been the result if D. H. Lawrence had been a professional instead of an occasional painter. A painted Lady Chatterley — the most exquisite technique notwithstanding — would surely have been so completely out of drawing, with the lower parts so much larger than the upper, as to have been hardly recognizable as a human figure. The picture could not have been hung, even in a speak-easy. In this matter of disproportionate emphasis on those phases of a subject which correspond to the writer's own neuroses, literature can 'get away' with a great deal that would be impossible in architecture, sculpture, painting, or even music. — AUTHOR

talia? It would be merely tragic had they not created a sort of 'holeroller' school of followers among the permanent intellectual undergraduates. Wyndham Lewis comes close to a definition when he calls it the 'idiot child' cult — the child overshadowed by the imbecile. As we have said, Skinner thinks, in the Stein case, it is conscious experimentation with 'automatic writing.'

One could also postulate: —

(1) That they are consciously pulling the legs of the large neo-intellectual public either for fun or for profits.

(2) That they are suffering from a well-recognized form of exhibitionism — the craving for sensational notice, whether approval or attack. This is the mild derangement that probably explains mediums. It is the impulse that, in a less pronounced form, leads people to write to the newspaper, to lend their names to cigarette advertisements, or to say in print that they 'suffered from fits' until they had taken one bottle of Neuropop.

(3) That they are seriously carrying on psychological experiments with themselves — in which case they ought to do it in decent privacy, as though they were taking drugs.

Or (4) that it is barely possible they are yielding to the uncontrollable impulse to expose their own diseases, just as the physically sick like to tell about their operations or their chronic colitis.

If they were commonplace people this exercise would attract only sympathetic attention. These are formidable machines and one wishes the insulation had not burnt off the power lines.⁶

⁶ One could of course multiply examples with 'cummins,' Ezra Pound, and so forth. We distinctly exclude Hart Crane, whom we had occasion to know when we were working on typhus in Mexico. He was a man of great talent, appealing and tragic, for he was very sick in spirit. — AUTHOR

However one looks at it, it appears to the medically informed that these people are substituting the spinal cord for the brain, or at any rate are moving down from the frontal lobes toward the basal ganglia.

'You've talked a great deal,' said my friend, 'but in the end it comes down to a definition of beauty — does n't it?'

'Well, give me one,' I replied.

'Here's the latest one,' he said. 'Beauty is the mutual adaptation of the several factors in an occasion of experience. Thus, in its primary sense, beauty is a quality which finds its exemplification in actual occasions. Or, put it conversely, it is a quality in which such occasions can severally participate.'

'Hail to thee, blithe spirit,' I replied. 'Bird thou never wert.'

'Well, let's go on,' he replied. 'In order to understand this definition of beauty, it is necessary to keep in mind three doctrines which belong to the metaphysical system in terms of which the world is being interpreted in this discussion. These three doctrines, respectively, have regard to the mutual relations (a) between the objective content of a prehension and the subjective form of that prehension, and (b) between the subjective form of various prehensions in the same occasion, and (c) between the subjective form of a prehension and the spontaneity involved in the subjective aim of the prehending occasion.'

'Stop,' I said. 'Is that by Gertrude Stein?'

'No,' he replied. 'It's by Whitehead.'

'Well, I'll be damned,' I said. 'I think I've decided that it's perfectly safe for me to go ahead with my biography of typhus.'

Indeed, I reflected when my friend had departed, whenever I think about these things for any length of time I

feel grateful for good honest diseases like typhus, syphilis, and a few others. You always know where you have them. And if you begin indulging in 'whimso-whamso' while you are engaged with them, they are sure to make a fool of you by putting you on your back. You either leave them alone or approach them with cautious competence.

Think what might happen to our modern critics if the great dead whom they inexpertly dissect could infect

them with psychic boils and carbuncles; or if Mr. Joyce's preoccupation with the intestinal functions, or if Mr. Eliot's shadow boxing with passion, or if the lubricities and sexual neuropathies of our too modern writers could subtly invade the brains where they were engendered with locomotor ataxia or paresis. Indeed, for all I know, perhaps they can. And there is no arsphenamin for the psychic treponema.

Typhus is far less perilous.

NO BIRD

BY THEODORE ROETHKE

Now here is peace for one who knew
 The secret heart of sound;
 The ear so delicate and true
 Is pressed to noiseless ground.

Light swings the breeze above her head,
 The grasses faintly stir;
 But in this forest of the dead
 No bird awakens her.

HEDE

Part One

BY PAUL HOFFMAN

I

HEDE FREY was a genius. A good many people thought all the Frey children geniuses. And why should n't they be? Their mother and father were first cousins, and, when first cousins married, their children were always either one extreme or the other. But almost never were they anything in between.

Right away, when they were little, the Frey children began to be geniuses. And Adam Frey, their father, was nothing but a tailor, and their mother, Lise, took in washings. Of course, they were good people, Adam and Lise were, but nothing to brag about for brains. Why, they did n't ever once find out for themselves that their children were geniuses; somebody else always had to do that. And even when someone had told them so, — someone who knew, too, — Adam and Lise looked as if they did n't believe and nodded their heads and shook them and smiled shyly. First, there was Tina on the piano, and then Wolfgang with his singing, and last of all Hede — Hede and her violin. Not until Hede did Adam and Lise believe for sure, but with her they did, and worked and slaved for their believing.

Maybe it was because Tina was so pretty and so hot-tempered, so good sometimes and so wicked other times, that they could not truly believe about her, and maybe they could not believe that way about Wolfgang because he

was only lazy and delightful. But with Hede it was different. Hede was not pretty at all in any way, and when she was little they called her *Stoffel* because she was so clumsy and did n't say much and was all the time only serious and busy. When she began to grow up, though, then Adam and Lise began to see; and once Adam and Lise could see, then was there no going backward, nor any doubting.

To be sure, Tina and Wolfgang, they had their lessons and good teachers, and when they did well Adam and Lise were proud and pleased, but never once did they let themselves in for disappointment with false hopes or with expecting too much of these two. And when Tina was grown up she was a good pianist, and everywhere at recitals she was asked to play, and always on the programme her name came last, which is where the best ones are. But one day she met a young man who was good-looking and full of enticing ways and a drinker and a spendthrift, and she ran away with him and got married and Adam and Lise did not hear from her for a long time — not until, thin and fierce-looking, she came home with her baby, hating her husband who had deserted her. No longer did she play much after that, only at odd times when her heart was a stone inside of her and she would not give in. But at such times she played as never before, and

when the family in their working heard her they were silent and sometimes afraid. 'Only a miracle,' thought Adam and Lise, 'can save her now.' And when that miracle came, it was death. Tina died in the influenza epidemic, and her mother and father cared for her little girl.

Wolfgang, he turned out to be nothing — only popular and good-natured. When the time came for such things, he learned a trade and sang at his work and got married to a nice girl who bore him many little girls and, at last, a boy. And in singing to all his little ones Wolfgang found all of himself that there was to find, and Adam and Lise were well content.

II

But with Hede it was different. Hede was a genius, and by the time she was fifteen there was nobody left in Naples who could teach her anything about the violin. But Hede was patient and kept on taking lessons just the same, and working hard and being quiet. At this time Hede was very plain, almost ugly. Her hair was straight and stringy and she had to wear glasses, but because she did not have much of a nose, and because she perspired so freely, they were always sliding down and she did not care at all about her appearance. She was quite short and thickset, and her arms and her hands met in a wrinkle, and her legs and her feet the same. But her muscles were hard and firm — in her arms and hands from holding and playing the violin, and in her legs and feet from standing to practise. But no one ever knew what was going on inside of Hede. Even Adam and Lise and Wolfgang could not tell from talking with her what she was thinking and what was in her heart. But they knew the fullness of her silence and believed in it and respected it. And then Hede learned that Nolte was to come to this country.

She was sitting in the kitchen eating her breakfast with the morning paper open beside her. Her mother was bending over her tubs in the laundry, which was the next room to the kitchen. They were alone in the house.

'Hey, Mom!' called Hede in her deep, slow voice.

'Yes — what is it, Hede?' asked her mother, pausing in her washing and brushing the hair out of her eyes with the back of one wet hand.

'Nolte's coming here next fall — to Boston.'

'Well?' said her mother, waiting to be enlightened.

Hede got up and, with the newspaper in her hand, walked to the door of the laundry.

'You know, Mom,' she said without taking her eyes from the paper, 'you know — Andreas Nolte, the one who made Dolmetsch and Pfeiffer and Pia Froschel!'

A slow comprehending dawned on Lise's face.

'O-oh, Nolte, he is coming — I see!' She nodded her head.

'He's giving master classes at the Conservatory,' Hede went on.

Lise bent over her tubs again and there was a long silence, broken only by the sound of sudsy water and the crackling of the newspaper as Hede scanned the rest of the news. At last Lise looked up once more, this time not at Hede, but out of the window to where her lines and lines of spotless linen hung drying in the spring wind.

'Well, Hede,' she said, 'to-night I will talk to your father.'

Without saying a word, Hede turned back into the kitchen and folded the paper, quite deftly for her, and went into the front room where the piano was and where she practised, and closed the door. Lise listened to hear her tune up, but for several minutes there was no sound.

'Maybe she is doing her harmony

first to-day,' thought Lise and went on with her work.

But in the front room Hede was weeping, weeping truly for the first time.

III

In the world of the violinist there was but one Nolte. And he had come all the way to America out of his native Bavaria to give master classes. It was unheard of. Everywhere all over the world those who knew him, when they heard of it, could not believe it. Nolte? In America? Could this be the Andreas Nolte that they knew? The same one who was known never to venture farther afield than Munich? The same one to whom the whole musical world came as did Mahomet to the mountain? It was beyond belief; the old fellow must be in his dotage. How else could it be? For Nolte, who was far from being a young man, to surrender his magnificent prestige, and for America at that — that upstart nation of new gold and of philistines! What, what was the world coming to?

But it was precisely for that new gold that Nolte had yielded and come. The war had been no kinder to him than to his colleagues. And so, early in the autumn of 1920, in the company of his incomparable assistant, Fräulein Wiener, and for the first time in his life, Andreas Nolte set foot on a boat — to come to America. In that autumn, too, Hede Frey passed her seventeenth birthday.

But on one score Nolte remained adamant. He would give his master classes, he would collect his handsome fees, but he would give no private instruction. Yes, he knew one could demand any price in this amazing country, and get it, too; no fee was unreasonable for even so little as fifteen minutes under the personal supervision of the titanic Nolte. But although he may have sacrificed his pride, his Old

World prestige, yet Nolte cherished his independence. No, never would he subject himself to the torture of listening to the vile sawing of any American fiddler — not he, he who had made Dolmetsch and Pfeiffer and Pia Froschel!

Pia Froschel, that darling! At seventeen she had played before every crowned head in Europe, — and there were still crowned heads then, — and the music-lovers of six continents had acclaimed her wizardry and skill. The little mouse! And he, Nolte, had made it all possible.

Yet life in Boston was not altogether unpleasant, and every week, almost every day, there were invitations from New York, from Philadelphia, from Chicago, from every great city in this vast country. Nolte liked it, too — this glory, this acclamation. Oh, he had been wise, he had been wise to do this! Let his old colleagues taunt him. 'Pride goeth before a fall.' He knew now what that oft-quoted adage meant, and he knew truly.

Wiener, yes, Wiener — she might well get homesick, for who had ever heard of poor Wiener? She had given up everything — her very identity even — to live in the great man's shadow. But she was a good girl, Wiener; Nolte did not know what he would do without her now. Yes, he must take her with him more — among the great, that is; he must see to it that they paid her some attention, too, for she could have made a name for herself as easily as not. But she had chosen otherwise, poor old Wiener. *Good Wiener.*

But if only they would stop pestering him about private lessons! Why, he had to make a rule that no one in his classes should leave the lecture room until five minutes after he himself had gone out. And he had made Wiener stay there to enforce it. But if he could not get a taxi right away, there they

were at his heels, clamoring for lessons. They would pay anything, anything! And when they could not find him, then it was Wiener that they bothered. They even made Wiener give them lessons — and gave her twenty dollars an hour. *Ach*, these Americans!

As if it were not enough that they should clamor so after his lessons, they seduced Wiener finally into doing it. And when Wiener hounded him, then was everything up.

'*Ach*, Maestro, just this once . . . please, for me . . . there is talent there, I know. . . . But, Maestro, if only once I see it tires you, frets you, I promise . . . I give my word, Maestro, I send them away and no more do they come back, no more . . .'

And so he gave in. The mighty Nolte was in the end overridden — and by none other than Wiener. Wiener, who until this moment for so many, many years had followed him about like a faithful dog, had been always meek and docile, had seen only to his wants and their gratification, had never thought of crossing him — she it was who had, at the last, betrayed him. *Ach*, these Americans — they had twisted his Wiener around their little fingers!

Well, he would make a compromise. No, Nolte never compromised — he would issue an ultimatum. He would give auditions to three.

'Mind, Wiener, only three! And send to me only the very best or — *ja*, Wiener, you know! Too, they must play only solid things, no murdering cadenzas, no —'

'*Ja*, Maestro, *aber ja*, natürlich!'

Nolte sighed as Wiener left the room. He clenched his fists and ground his teeth. He wished Wiener were dead.

IV

Nolte was in a bad humor on the morning scheduled for the auditions. He was feeling at his most perverse. He

wanted to knock Wiener down and then to kick her. He wanted to go back on his word, to cancel the auditions, but he did not quite dare. After all, he would probably have to spend the rest of his days with Wiener. So he smiled grimly and helped himself generously to cognac and sat down to wait for Wiener's trio of talent.

Promptly at eleven Wiener beat her ridiculous tattoo on his door and, as usual, opened without waiting for an answer. That made Nolte angry all over again. Why, *um Gottes willen*, did that woman trouble to knock so long as she intended to walk right in anyway?

'Well?' he bellowed at Wiener's smiling face, and glowered.

Wiener closed the door noiselessly behind her and advanced hesitantly.

'*Die drei*, Maestro, *sie sind draussen*.' There was anticipation, a bright excitement, in her voice.

For answer Nolte rose and walked over to a window, still glowering. His lower lip was thrust out and as far upward as it would go.

'*Na*, *worauf wartst du denn?*' he barked at her over his shoulder.

'I only wanted to know, Maestro, if you are ready,' answered the long-suffering Wiener.

Nolte would not give in, he could not. He nodded his head vaguely and grunted affirmatively. Wiener bit her lip to keep from laughing outright at his feeble deception and walked back to the door. She beckoned to someone outside.

'Come in,' she whispered.

A squat figure slipped inside, carrying under her left arm a violin and in her right hand a bow. Wiener pointed out the bristling back at the far side of the room and laid one finger across her lips. Then she indicated the spot where the girl should stand and motioned her to tune up. The girl shook her head; she had tuned up outside. But she drew the bow once across the strings

firmly and quietly. A perceptible shudder was all Nolte allowed himself, that and a slight painful hunching of the shoulders. Wiener bit her lip again and nodded at the girl.

Into the silence of Nolte's room a single true note penetrated, followed swiftly by another and upon that still another. Wiener looked toward Nolte, who was standing so lifelessly still that it seemed he must topple over. She looked anxiously toward the girl. For ten minutes she went on, well into the second movement of her *partita*. Then Nolte wheeled round and strode down upon her. His eyes were blazing.

'*Hören Sie auf!*' he bellowed. 'Stop!'

The girl stopped and looked up at him, calm and unafraid.

'Not that way!' he shouted. 'Never that way for Bach!'

He lifted his right hand and with grave deliberation placed the tip of the index finger against the tip of the thumb, all the time vibrating his hand and forearm.

'It must be so,' he barked, 'distinct, well defined. It cannot be hazy. Bach, he is no romantic — no mist, no spray. He is clear water; he is a spring and a river and sometimes the sea. He is the daylight and the clear night, but no, never is he only dusk! *Sehen Sie?*'

The girl nodded and paused a moment as if to think over and to absorb what he had said. Then she played again, and until she finished Nolte did not interrupt her, nor did he move away from her. His eyes were large and bright as they scanned her plain still face and her stubby skillful fingers. He had forgotten about Wiener, and all his ill humor had left him. When the music had ceased the girl tucked her violin under her arm again and, waiting for Nolte to speak, watched her bow swing back and forth as it hung from the crook of her right index finger. Nolte reached out one hand and placed it gently on her forearm.

'*Mein Kind,*' he began softly, 'you know what I think, don't you?'

The girl looked up into his face and her eyes were serious and intent, but there was no perplexity in them. She nodded her head knowingly. Nolte let his hand fall.

'Very well, you may go.'

The girl turned and walked toward the door, smiling a little at Wiener, who was weeping. As she placed her hand on the knob Nolte called after her.

'What is your name, my friend?'

'Hede Frey, sir,' the girl answered quietly and went out.

'Hede Frey,' echoed Nolte softly, and looked kindly at Wiener.

He shook his head slowly and his eyes were full of pleading.

'Not to-day, Wiener,' he said, 'the others — tell them I hear them to-morrow.'

Wiener nodded and dried her eyes.

'*Ja, Maestro,* as you say.' She left him alone.

For several minutes Nolte stood looking at the spot where Hede had stood for her playing.

'Hede Frey,' he said to himself over and over, 'Hede Frey and Pia Froschel. Those two, they shall be mine.'

Then he walked across the room and poured himself a drink of cognac, and as he lifted it to his lips there were bright tears standing in his eyes.

V

When Nolte's year in Boston was up, he went to Chicago and took Hede with him. It never occurred to him that it could be otherwise, for he knew nothing of Hede save her genius. He did not even know where she came from. He did not know that at home Adam and Lise were denying themselves all but the most meagre necessities to keep Hede with him. He did not know that Lise, unknown to everyone, was draw-

ing constantly upon a small inheritance left her by her sister, which she had once hoped to put by against Adam's and her old age. He did not know that Adam had lied to his wife for the first time in their long married life, telling her that his wages had been cut and then sending the difference each week to Hede. He did not know that Lise was taking in six more washings every week than ever before, or that Adam was secretly cheating his union and working on piece work in the evenings. Nolte did not know all this, and, had he known, it is doubtful whether he would have cared. Hede was a genius, and for genius everything must be sacrificed.

It was the shrewd Wiener who finally pieced together the dreary facts and faced them. She found out nothing definite, since definite information must come from Hede and she was a silent creature who worked incessantly with never a word for anything but music. Her long acquaintance with Hede, instead of reassuring Wiener and establishing a true friendship between the girl and herself, seemed only to separate them, and Wiener was mystified. She was a friendly soul, Wiener was, and her simple, open nature was stung and hurt by the impregnable. And so only by much baffling observation and by her intuition and by her active Teutonic reasoning Wiener began to understand Hede's mystery.

The conclusions which she reached frightened her, for, after all, was she not responsible for bringing Hede and Nolte together? Was it not she who had insisted that Nolte accept Hede's fees when he, with his typical generosity, had suggested that he take her for nothing? For from the first Hede had somehow looked poor and Nolte must have sensed it. It was too late now, however, to broach that subject to Hede or to Nolte, because she felt that it would only bring disaster and recrimination upon herself. Wiener could live

without Hede's love or even her friendship, but her hatred would be too much to bear. Wiener knew, too, that any interference now on her part would make Hede hate her. So she let matters drift and hoped for the best.

Once, in one of those moments of indecision and fright, Wiener had spoken evasively to Nolte about Hede's future. It was Nolte really who had started it by referring affectionately to Hede's plainness.

'Ja, Maestro,' Wiener had agreed, and then shook her head a little, 'but I am afraid for her when she stands on the concert stage.'

Nolte winked at her. 'Ach, Wiener, but that will be her charm! Don't you see?'

He leaned forward excitedly and the look in his eyes anticipated the event.

'When she comes first out, everybody is disappointed. "The ugly duckling," they will say. And then she begins to play — ach, Wiener, don't you see?'

Wiener nodded. 'Ja, all that I see — in Europe. But here in America, that is something else again, *nicht wahr?*'

Nolte's eyes flashed. 'Well, that is easy. Then she comes first out in Europe!'

'But, Maestro —' Wiener did not finish. She did not quite dare to go on.

'But what?' bellowed Nolte, thoroughly aroused.

Wiener shrugged her shoulders and rose.

'Ach, it makes no matter,' she answered, and left the room hastily.

If only she were sure that Hede was conscious of all the complications of a début. Did the child know how expensive it would be? Did she know how much depended on luck and opportunity? One thing was certain: Nolte would never enlighten her, for he abhorred the practical. And yet, all these same considerations were what had kept him from the concert stage.

But his subsequent renown and self-realization as a teacher had obscured all that within himself. Then, too, never before had Nolte taught anyone without ample financial backing. If pupils were poor themselves, at least they had patrons.

'Alas,' thought Wiener, 'for us all! And only I — I who matter the least — am prepared.'

VI

And then, one morning in the late spring of that second year with Nolte, what Wiener had feared and awaited came to pass. Hede had a letter from her mother.

'Hede, *Liebschen*,' it began. 'I am afraid now I must tell you what I do not want to. Your father and I, we can't help any more right now. But don't be sad, *Herschen*, you are young. Some day it all comes out all right. I can't say any more. Come home, Hede. We will be good to you.' . . .

That was all. But Hede did not show it to Nolte or to Wiener. She simply told them that they needed her at home for a little while and asked Nolte for a letter of recommendation. She might do a little teaching, she told him.

Nolte was beside himself. '*Aber, Kind*, you can't mean it! Now, now is the important time — now we are trimming and polishing. Six months and you are ready. Think only! Six months just.'

Hede shook her head and smiled one of her rare smiles.

'No, Herr Nolte,' — Hede had never been able to call him Maestro, — 'it's useless to talk. I have to go, but I'll come back.'

Nolte tore at his hair and paced the floor.

'Come back? *Ja*, when? You will come back! And then we got to start in all over again.'

Hede lowered her eyes. 'No, we

won't. I can work alone a few months. That won't do me so much harm — now, will it?' She turned her strange untelling eyes upon Nolte.

Nolte reddened and raised his voice to a shriek. '*Gott im Himmel*, Hede, what on earth has come over you now? You work — without *me*!'

He turned to Wiener for assistance. Wiener was too frightened to speak.

'But for why,' he wheeled around and screamed at Hede, 'for why must you go back?'

There was a long silence, and Wiener shuddered to think what was coming.

'Because,' Hede began in her deep, even voice, 'because they're stripped, my mother and father. They've sold their shirt to keep me — here.'

Nolte closed his eyes and the color slowly left his face. Wiener was twisting her handkerchief and looking fixedly at the floor.

Hede softened a little. 'It's no use talking, Herr Nolte. I've got to go. They need me for a while.'

The hot tears rose to Wiener's eyes at that and she felt helpless and humiliated. Nolte opened his eyes.

'And how long do you stay away, Hede?' he asked her kindly.

'Not long, I hope,' she answered.

'And if I find for you a patron, then what?' asked Nolte.

Hede shook her head. 'It's not that, Herr Nolte, that I want. Not for me, anyhow — for them, maybe, yes.' She laughed a little, a chunky, uneven laugh.

Nolte looked at her emptily and shook his head slowly.

'No, you never come back to me. I see it all now.'

'Oh, but you're wrong, Herr Nolte, honestly you are!' Hede folded her arms behind her back and began to draw imaginary figures on the rug with one toe. 'You see, if it were to be any other way, I'd be missing something — for myself.'

Her toe was still and she looked full at Nolte. Suddenly her eyes burned and shone with courage and truth and innocence.

'And I never want to miss anything, Herr Nolte.' Her deep voice was full of strong, sad music. 'I always want all that's coming to me. And I'll be better for it, too. I know it,' — unexpectedly she walked up to Nolte and laid a hand on his arm, — 'and so do you, Herr Nolte.'

Nolte winced and was silent for a moment. Wiener pressed her knotted handkerchief between her lips.

'All right, Hede,' said Nolte sadly. 'When do you go?'

Hede patted his arm. 'Why, pretty soon, I guess. The end of the week, maybe.'

Nolte took her hand. 'To-morrow you come back, Hede,' he said. 'I have the letter.'

Hede pressed his hand and released it. 'Thank you, Herr Nolte.'

She moved toward the door.

'Good-bye, Fräulein.'

Wiener made a gesture with her free hand. She could not trust herself to speak.

When the door had closed behind Hede, Nolte walked slowly across the room and stood at one of its windows looking out into the bright spring day. Wiener watched him, and it seemed to her that his shoulders sagged and he was looking older, almost old. She dried her eyes then and walked over to him. Together they looked into the brightness, but neither saw anything.

'Wiener,' said Nolte at last and passed an arm across her shoulders, 'we go back now, back home. It is time.'

VII

It took Hede eighteen hours on the train to come back to Naples from Chicago. All the way she sat quietly in a day coach, forgetful of time or of

movement. Now and then she looked out of the window, but the swift-changing scene beyond it, the darting trees and telegraph poles, the swooping wires and the bulging hills — all these Hede stared at as if they were nothing, as if they were not there. More often she let her eyes fall upon a letter that lay open in her lap. It read: —

To Whom It May Concern:

I have been a teacher of the violin for nearly half a century. In that time it has been my pleasure and high privilege to help to develop a few geniuses. Two of those geniuses were women. Pia Froschel is one of them, Hede Frey the other. Neither, in my esteem, has ever surpassed the other.

Respectfully yours,

ANDREAS NOLTE

Hede could not believe it: he had made her equal with Pia Froschel! She thought back over her two years with Nolte and she could not believe it. After all, had he not held up before her always the greatness of Froschel as something to strive after, yet with scant hope of an equal attainment? Nolte felt sorry for her, he knew what was ahead of her, — the unsavory struggle with circumstances, the loneliness and despair, — and he wanted to alleviate it. Yet Nolte was not unkind, never cruel, and had he not meant every word of it, that would have been cruelty in the extreme.

What did it all mean? And would she ever come back? Hede saw now how effortless, how easy until this moment her life had been. Until now she had only wanted hard and worked, and in due time always the occasion had come and she had been ready. She saw now that hitherto, no matter how arduous and slow, her life had been a progress forward — toward ends and aspirations. What immediate beauty she had been enabled to put into her playing had been a kind of spiritual inheritance combined with a vicarious

fulfillment of the living that surrounded her. Never had she been impelled by necessity to live; the morrow had taken care of itself, or, more truthfully, been taken care of.

That led her to the thought of Adam and Lise, to their believing, and to their struggle for her consummation as an artist. Her heart swelled within her and tears of anguish burned behind her eyes. In their generosity she discerned the paradox of love. In sparing her they had robbed her, all unknowingly and with the noblest intentions, of the artist's ultimate achievement — to acquire at first hand the language of life, to construe and to articulate that complex medium. Suddenly Hede saw herself and her art as an implement, perfected in pattern and execution, shining and idle. Why, why had they done it?

But remembering them, whom for so long now she had not seen, she could

not find it within the innocence and justice of her heart to condemn. For had their instinct not been rooted in love, a love that was utterly selfless? And, without proof tried and tested, Hede knew that in the end love can accomplish no wrong thing. It might forestall and postpone, but in the end its purpose must be fulfilled. And so, in this her first true knowing, Hede found comfort to face the dreary days before her — their extension and perplexities.

And when the long journey was ended and she saw from her window the figures of Adam and Lise scanning the faces in the slowing train, she was touched with a newness of wisdom and courage and a deep joy in sharing a high charge. She stepped forth to meet them, and as they saw her the anxious eyes of Adam and Lise began to shine, and within they felt a sudden peace and security.

(To be concluded)

STREAMLINING

BY NORMAN BEL GEDDES

I

ORIGINALLY, the word 'streamline' was a term of hydrodynamics. About the year 1909 the science of aerodynamics borrowed it to describe smooth flow of air as well as the form of a body which would move through air with a minimum of resistance. For some years 'streamline' in its aerodynamic sense enjoyed honorable obscurity in the physics laboratory and the shop talk of engineers. Last year, however, advertising copy writers seized upon it as a handy synonym for the word 'new,' using it indiscriminately and often inexactly to describe automobiles and women's dresses, railroad trains and men's shoes. Into such general use has the word come that it is, perhaps, time to examine its meaning and its implications.

The truth of the matter is that very little is known about streamlining. Most of the popular explanations have treated it as though the facts were established and accepted, and in this respect some technical treatises have not been without fault. Streamlining as a science has not yet really been born. Its practical development in aeronautics has been highly effective, but not understood. In other fields, both in theory and in practice, it is still in embryo.

Even the assumptions upon which the science is based elude proof and have neither been demonstrated nor been clearly visualized. In 1755 Leon-

hard Euler devised three monumental equations for the flow of an ideal fluid — one which has neither compressibility nor viscosity. He was thinking in terms of liquids, but his work applied to air as well. The equations assumed that fluid flow was a *continuation of particles*. It is worth noting that even to this day no one has accurately pictured what air particles consist of, or how they act. Nevertheless, the Eulerian assumption and equations form the backbone of modern streamline thought.

To understand how there can be value in an assumption which cannot be visualized and an equation for an ideal substance which does not exist, it is necessary to appreciate the distinctions between mathematician, physicist, and engineer. The mathematician is less concerned with the correctness of assumptions than with the mathematical structure erected upon them. The physicist, on the other hand, is interested in the correctness of assumptions, for he must connect the mathematician's equation with what actually happens in the physical world. The engineer, finally, takes the equation, substitutes the physical quantities determined by the physicist, and emerges with a practical solution. The physicist and engineer, since their theory must spring from present knowledge, can advance but one step at a time. The mathematician, however,

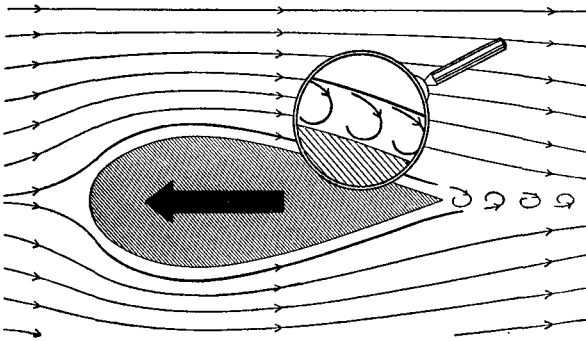


Fig. 1—The boundary layer follows the form of a streamlined body

proceeding on pure reason, can transcend knowledge and can completely organize a science long before the full significance of his thinking is realized by the physicist, the engineer, or the mathematician himself.

Euler's equations have never been reduced to terms which the engineer can use, for the sum of to-day's mathematical and physical knowledge is still too meagre. It has remained the plaything of other mathematicians. And while Euler's *continuation of particles* assumption is as nebulous as it ever was, it has become more firmly entrenched with the years because it has not been disproved. It has ceased to be hypothesis and is now fundamental theory.

II

Streamlining is the use of forms which reduce air resistance. Strangely, the first sound thinking on the nature of air resistance was stimulated not by the wind-driven ship, which was a commonplace, but by speculation on human flight, which for the particular age was an insanity. Leonardo da Vinci, compiling data on the flight of birds for his own flying machines in 1505, sensed that the force supporting a bird was related to the flow of air, that the flow of air was similar to that of liquids, and that the motion of air, being invisible, could best be learned

from study of liquids, which could be observed visually.

Probably to Giovanni Alfonso Borelli should go credit for first putting a finger on the cause of air resistance. In the seventeenth century he wrote that when a body passes through air it must displace air and in so doing set it in motion. Commotion of the air, he held, could not take place without the develop-

ment of forces resisting the progress of the body. The body must sacrifice some of its own energy to the air it disturbs. Borelli had hit upon *turbulence*, which is the crux of fluid resistance.

The study of the effect of form on air resistance began with Sir Isaac Newton. In his *Principia*, published in 1686, he proceeded on a mathematical basis to deny the influence of the rear form of a body and to assume that the important thing was the angle at which the individual particle impinged on the surface. Later developments showed that he was not correct. The flow of fluids was found to be more complex than Newton had thought, and in the early nineteenth century Duchemin proved experimentally that the rear form was fully as important as the front. Broadening the Eulerian approach, Sir George Stokes in 1845 modified Euler's equations to actual conditions by adding terms for viscosity and compressibility.

The present accepted theory may be expressed as a direct progression from Euler to Stokes to Prandtl. At the beginning of the twentieth century Ludwig Prandtl assumed that all air forces resisting the motion of a body could be considered as acting within the *boundary layer*. The boundary layer is a layer of air which, because of air's viscosity, tends to cling to the surface of a

body. Its thickness varies with the size of the body — from one tenth of an inch in a two-foot body to about twelve inches in a body several hundred feet long. Within it the flow pattern is generally turbulent, seemingly consisting of very small tubes of air which act much as roller bearings over which the outer air moves. In general it might be said that as long as the form of a body is such that the boundary layer is kept in contact with the entire surface, the body is streamlined (Figure 1) — a condition easier to state than to fulfill.

When the boundary layer breaks away from the surface, turbulence results on a large scale, taking the form of vortices and eddies which sap the body's energy (Figure 2). There is a difference of scientific opinion as to what occurs when the boundary layer breaks away, for the moment the turbulent forces begin to act outside the boundary layer, Prandtl's theory no longer holds. Precisely what causes the boundary layer to leave the surface or what goes on in the area of turbulence is rather vague and controversial.

There are but three basic conditions which are known to affect the behavior of the boundary layer. The first is that in general any irregular protuberance on the surface of the body alters the form of the flow of air and causes a breakaway. The second is that in most cases the boundary layer will cling best to a curved surface. The third is that very high speed causes a breakaway. Because theory is incomplete, all practical advance in streamlining has had to be empirical and the aeronautical engineer has led the parade.

The empirical method is one of experiment. Various solid shapes —

models of wing sections, fuselages, and complete airplanes — are placed in a wind tunnel. The wind tunnel, an apparatus devised by Eiffel, is usually a long tube in which the model to be tested is fixed in position while a wind is driven by it. The forces produced are measured by sensitive balances. Certain models register less resistance — or *parasite drag* — than others. The models are then altered and more data secured. Slowly, from a good many thousand such experiments over a period of years, certain desirable forms, proportions, and relationships have been established for the airplane.

As often happens in experimental work, some highly accurate information has been obtained, although no one quite knew the nature of what was being investigated. Attempts were made to observe the habits of air in motion by introducing smoke into the air stream and by other means. Accepted theories were confirmed and their visualization became somewhat more definite, but nothing was learned which might be called new knowledge.

The experimental findings checked closely with the performance of actual airplanes duplicating the lines of the models. By the use of a mathematical system for scale correction introduced by Osborne Reynolds in 1895, the performance of a new plane could be reasonably predicted from the model tests

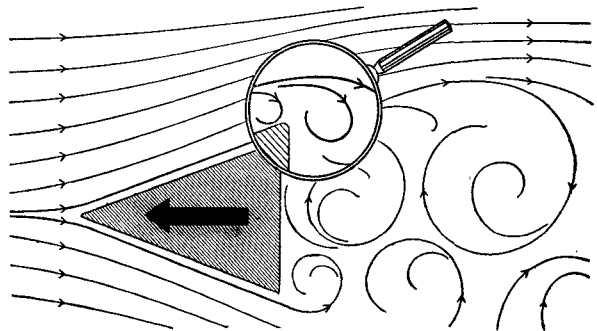


Fig. 2 — The boundary layer breaks away from a non-streamlined body

in the wind tunnel, thereby considerably improving the state of mind of the pilot who made the first test flight.

There are still gaps in the knowledge of fluid flow, even about a body in free flight, which will probably not be closed until it is possible to approach the problem from pure theory. A large airplane completed this year was calculated to have a maximum speed of 165 miles per hour. In actual flight, however, it flew at 192 miles per hour. The difference between the computations and the facts has not been explained in this and many similar cases. Another indication of our ignorance of the flow of air appeared in a recent tunnel test when a wind of 500 miles per hour acted on a standard wing section whose characteristics were fairly well accepted. The boundary layer broke sharply away in streamers at right angles to the surface. There is a euphonious name for this conduct, — *compressibility burble*, — but the cause of it is unknown.

In spite of the hiatus here and there in the theory, parasite drag in the airplane has been eliminated to an amazing degree by the empirical method, and airplane streamlining can be considered to be approaching practical perfection. In 1918 a 400-horsepower motor drove a plane at 125 miles per hour. To-day the equivalent power in a comparable plane would produce a speed of perhaps 200 miles per hour.

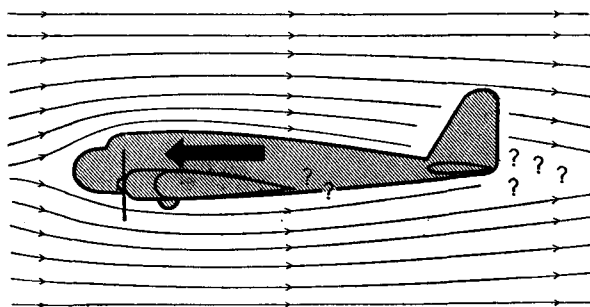


Fig. 3 — Airplane streamlining is very effective. There are few places where the flow pattern is uncertain

III

In the scientific sense, streamlining, so highly developed in the airplane, has made but little progress in the motor car, the railroad train, and the steamship, all of which stand to gain in efficiency, riding comfort, and economy when drag is reduced. Though streamline attempts have been made in several trains and motor cars, their influence on drag is open to question. In the American mass-production automotive field, only the Chrysler and De Soto can be considered as pointing toward authentic streamline form. Nevertheless the significance of these two cars lies not in their streamline efficiency but in the foresight and courage shown by Walter P. Chrysler in departing abruptly from traditional attitudes of appearance. What the scientifically streamlined automobile will look like can merely be assumed within fairly broad limits, but it will certainly bear little resemblance to the car of to-day. The weaning of public taste from its illogical prejudices in the matter of appearance is paving the way for whatever form will best meet the automobile's requirements.

It has become fashionable of late to predict what streamlining will do for the motor car and the train. Unusually high speeds have been foreseen and practically no fuel consumption at all. While it is perfectly reasonable to expect a great deal from streamlining, the fact remains that its possibilities in the automobile and the train have been viewed through glasses made rose-color by the experience of aeronautics. Because of two factors not encountered in the free flight of an airplane, present knowledge does not assure us that the airplane's great success in

overcoming parasite drag will be easily repeated in a vehicle moving in contact with the ground. These two factors are *ground effect* and *cross winds*.

The flying airplane is emersed in a fluid the flow characteristics of which are virtually identical on all sides (Figure 3). Were it not for the force of gravity, the plane would perform equally well right side up, upside down, and on its side. The automobile, however, because of the presence of the ground, cannot be assumed to have identical flow characteristics on all sides (Figure 4). Consequently the available streamline data for the airplane cannot be regarded as accurate for the car. Since the nature of ground effect is as mysterious as most other aerodynamic conditions, the automotive engineer must take the long slow road of laboratory experimentation if he is to arrive at highly effective streamline forms.

Unfortunately, actual experimentation cannot begin until practical, accurate methods and apparatus are developed. The means at present available for the study of ground effect are not satisfactory. Outdoor tests with full-scale models are complicated by variations in wind and road conditions. Small-scale wind tunnels have been used with running belts or revolving disks to simulate a road moving under the wheels. But the belts have flapped the stream of air into chaos, and the disks have failed to represent road conditions with the necessary accuracy. There is need for a representative road surface which can be run at high speed without flutter, and with a new treatment of the test chamber to reproduce road performance. This tunnel should also permit both the surface and the model to be turned at an angle to the

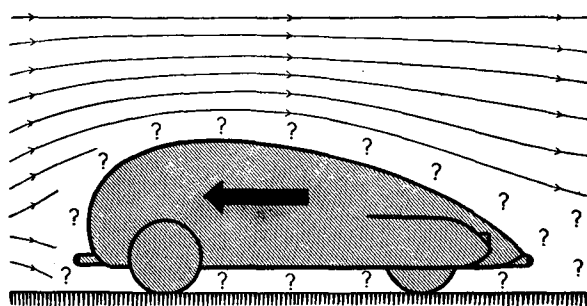


Fig. 4 — The ground effect makes the flow pattern around a motor car a matter of conjecture at best

wind, for car streamlining will not flower from knowledge of ground effect alone. There is, in addition, the matter of cross winds to be considered.

To the flying airplane, aerodynamically speaking, there is no such thing as a cross wind (Figure 5). This is a fact and not an opinion, and yet a great many people insist on arguing the point. To visualize why a cross wind does not affect the flow pattern around an airplane, imagine a dirigible floating above the earth with its motors stopped. If there is wind, relative to the ground, the dirigible will drift in the wind's direction and at its speed. The air, relative to the dirigible, will be motionless, and a man putting his hand out a gondola window will feel no wind whatsoever. If, now, the motors are started, the dirigible will head directly into the air, just as though it were starting from the ground on a day when there was no wind at all.

Substitute an airplane for the dirigible and the conditions are unchanged. From the time the plane's wheels leave the ground until they touch again, cross winds do not exist as an aerodynamic factor. It is well known that an airplane takes off and lands into the wind. This eliminates the cross effect while the wheels are in contact with the ground. The wheels of the plane landing in air which is moving at forty miles an hour across the runway would

suddenly anchor the plane and cause a ground loop and a probable crash.

The automobile does not drift with the wind as an airplane does and must contend with cross wind a great proportion of the time (Figure 6). The fact that the average wind velocity in this country is estimated at not more than ten miles per hour has been offered as evidence that cross winds are not important. However, a cross wind of even such low velocity, acting at right

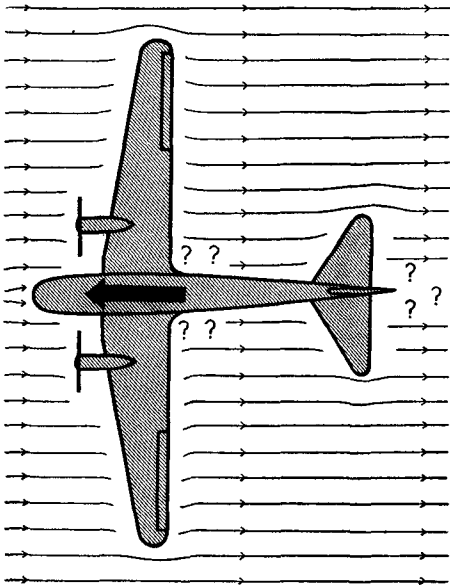


Fig. 5 — The airplane *always* meets the air directly head-on

angles to the road, might destroy a considerable part of the body's streamline efficiency because of the altered flow pattern of the air. The forms which are effective for the airplane will not, therefore, suffice for the motor car, and new forms must be developed. Cross winds, moreover, affect stability as well as parasite drag. Comparatively low velocities can impair the accuracy of steering, and high winds find little difficulty in blowing a car entirely off the road. By reducing the resistance offered to cross winds the car's stability would be increased, provided that the

location of the centre of pressure were within the necessary limits.

IV

From the technical point of view, then, streamlining of the motor car must reduce resistance to the air, both head-on and from the side, and must maintain present stability or improve it. The first and simplest step, and the one which is now under way, is the elimination of protuberances — head-lights, fenders, door hinges, spare tires. Clean continuous lines from front to rear would aid in reaching all the objectives. The second and certainly equally important step is the development of the form. It is probable that this form will be a compromise, for it is extremely unlikely that any single solution can ideally satisfy all requirements. More than that cannot intelligently be said at the present time, nor can the form be foretold until the advent of sound data specific to the motor car, or until theory becomes more complete.

The technical requirements are not the only ones, however, and it is to be expected that further compromises will be necessary to provide convenience and comfort — two factors that are becoming increasingly important as the car ceases to be an article of sporting equipment and takes its place with the stove and the toothbrush as a normal commodity. It is likely that part of the problem will be to see how much space can be afforded the passengers, and, conceivably, the public will come to demand some of the roominess and comfort that are enjoyed in a small room of a home. At the same time, broad visibility and ease of riding, driving, and parking will have to be provided. Streamlining will decrease the noise caused by undirected flow of air and will result in a more quiet ride.

The logical development of the

streamline car will probably mean the placement of the motor in the rear. The space in a tapered rear could be used to better advantage to house the engine than for other purposes, and the front end, the largest part of the body, would be released for driver and passenger accommodations. There are several technical disputes to be adjusted before the rear-engined car becomes a frequent sight on our roads, but no insurmountable obstacle seems to exist. In Europe at the present time there are several manufacturers offering cars of this type.

While a perfect streamline form would add a somewhat greater top speed to the performance of an automobile to-day, greater speed is not the goal of the car as it is of the airplane. Practically all recent cars can attain a speed of seventy miles per hour, which is quite fast enough under present conditions for all but a rare driver on an even rarer stretch of perfect road. The object of reducing air resistance is to increase efficiency and economy of operation, and while streamlining can make this possible, it cannot, unassisted, accomplish it.

A conventional car, equipped with a streamlined body offering virtually no resistance to air, would require less than half the power formerly needed to drive it at fifty miles per hour. Yet gasoline consumption would by no means be halved, for the engine would be operating inefficiently. Greater economy would come from halving the size of the motor, but with half the power, ample for level running, the car would be sluggish to accelerate and climb hills.

Accelerating and hill-climbing ability is determined by the ratio of effective power to weight and is only slightly affected by air resistance. If the car weight were reduced by half, the smaller motor would produce the same pick-up and hill-climbing performance

as the larger motor in the heavier car. But the lighter car, with present-day springs and tires, would probably skid more easily, bounce uncomfortably on a rough road, and be more at the mercy of cross winds. Nevertheless, smaller motors are essential to the realization of the benefits of streamlining, and they can be used in even heavy cars when the present fixed-ratio transmission is replaced by a means that will

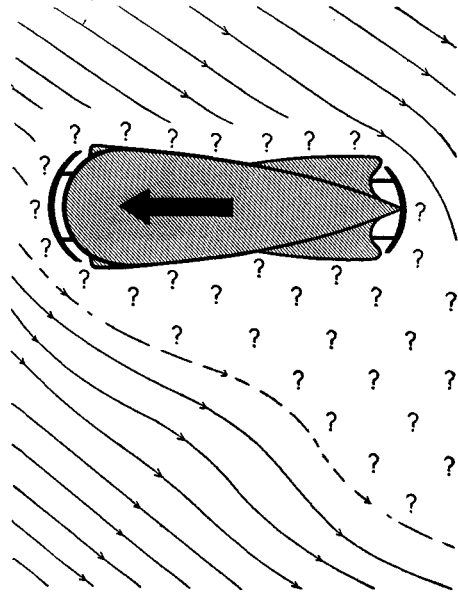


Fig. 6 — Motor-car streamlining is complicated by cross winds

give a continuously variable gear ratio between motor and wheels.

It is an idiosyncrasy of every internal-combustion engine that it delivers a different amount of power at each speed. In high gear, a motor developing forty-five horsepower at a sixty-mile-an-hour car speed may produce less than twenty horsepower at a twenty-mile-an-hour car speed. With existing transmissions, too little power is available at low car speeds in high gear, and too much at high speeds. The variable gear ratio would permit the motor to run at the lowest rate at which the necessary power could be

smoothly applied to the wheels, a condition which would reduce oil and gasoline consumption and engine wear. The same variable gear ratio, with a different setting, would provide maximum vitality for acceleration and hill climbing by making it possible to apply the full horsepower of the motor to the wheels regardless of the speed of the car. In spite of the decreased maximum power of the smaller motor, greater effective power could be called on and the car would be more responsive to the driver's touch.

Streamlining combined with variable gear ratio would bring considerable economy to car operation. There is one school of thought which holds that the motoring public is not concerned with lower running expenses. However, since the bait would probably consist of savings to American car owners of over a billion dollars annually, a certain spark of interest could be expected to be shown. And a billion-dollar saving is a conservative estimate, which considers all the probable limitations of automobile streamlining.

V

Because of the similarity of function between the automobile and the bus, any development which reduces parasite drag in one will be applicable in some degree to the other. As a matter of fact, the bus will perhaps use streamlining the more advantageously, for decreased drag brings its greatest reward during sustained running, which is more often the function of the bus than of the automobile. Moreover, the dimensions of the bus offer greater latitude for the development of a form to which the boundary layer will have an affinity. Consequently air resistance may be more effectively overcome. The bus already has at its disposal a variable gear ratio in the Diesel-electric drive, which is too expensive and too

heavy for use in the passenger automobile. Even if the advantages of streamlining the bus are not actually greater, they will probably be achieved sooner.

Most of the problems of streamlining the car and the bus will also have to be solved for the railroad train. The importance of parasite drag in this field of transportation can be appreciated from the fact that air resistance is often sufficient to demand a reduction in tonnage. At times it is great enough to stall a train. In view of the publicity attending the appearance of recent trains that bid for streamline honors, it should be remarked that streamlining and the railroad train are old friends. As far back as 1847, Bessemer ran tests on the air resistance of trains at various speeds. A locomotive with streamline tendencies was exhibited at the St. Louis World's Fair in 1876. That and the 'Wind-splitter' of the eighteen-nineties were two of the earliest-known attempts to modify the form of any vehicle with regard for air resistance.

Some of the present streamline trains have done three things toward lessening resistance. They have faired-in the articulated joints, and the continuous surfaces thus produced have helped to decrease one cause of turbulence. They have decreased the projected frontal area to which air resistance is proportional. And to some extent they have tapered the rear end of the last car. It is doubtful, however, if streamline efficiency is high.

Development of a proper streamline form for the train will require special data accumulated in the same kind of wind tunnel in which the motor car and bus would be studied. It is unlikely, however, that the train will ever conquer parasite drag to the same degree as other land vehicles. Just as the dimensions of the bus are more adaptable to streamline purposes than those of the

car, the dimensions of the train are less so than either. The comparatively great length and narrow width of the train require long flat surfaces which are not conducive to control of the boundary layer.

In spite of the uncertain effectiveness of present train streamlining, operating efficiency has been improved by a reduction of weight resulting from the use of new materials and structural methods. On the *monocoque* principle of construction, the outer shell has been designed to act as a structural member, sharing the stresses with the beams. Smaller beams have been used, and, since they are made of light new materials, their weights have been but a fraction of those common in railroad practice. Because conventional trains weigh far more than is necessary for traction and braking power, the performance has not been adversely affected, although what would happen to one of these light trains in a collision has been the subject of speculation. With decreased weight, less power has been needed and a Diesel-electric drive has delivered it for less money, at the same time maintaining the variable ratio between engine and wheels provided by the steam engine.

VI

Of all transportation means the steamship has been the least responsive to the prospects for greater speed and economy of operation which can be gained from a decrease of air resistance. There exists a general attitude on the part of the operators that, since air drag is a small proportion of the ship's total resistance, it is not worth worrying about. So negligible was the effect of wind thought to be that until the last few years speed trials, most accurately conducted in other respects, practically disregarded the wind conditions prevailing at the time of test.

Runs were made in two directions on the supposition that the effects of wind would cancel out. However, a ship at twenty knots, with a following wind of twenty knots, shows a speed increase equivalent to an increase of power of 2 to 4 per cent over the speed in still air. Heading into the same wind, the power loss may be as much as 16 per cent. Obviously the average tells a false story.

It is difficult to understand why the factor of air resistance should be snubbed when the speed rivalry between ships is so intense and so much money is spent for larger engines and more fuel in efforts to win blue pennants for ocean crossings. Ships, like airplanes, are tested in model form to determine full-size performance. The tests are usually made in water tanks and are concerned only with water resistance, stability, and manœuvrability. Actual performance, however, varies considerably from the results of the tank tests, presumably because of the direct and indirect effects of air resistance. In one study of a large number of transatlantic crossings, the average increase of resistance at a given speed, compared with tank predictions, was 30 per cent east-bound and 100 per cent west-bound. The greater west-bound variation seems to have been caused by the normally greater westerly winds and consequently heavier seas. These figures would certainly seem to warrant more respect for the resistance of air.

Except when a large ocean liner meets the wind directly head-on, it presents a larger resisting surface to the air than the total useful sail area which drove a clipper ship. In addition, the form of the hull above the water line and the irregularities of the superstructure promote turbulence of tremendous magnitude (Figure 7). Wind striking a conventional liner is made turbulent by every rivet, overlap, and porthole.

It climbs on deck and swirls around ventilators, towing bitts, hoists, lifeboats, davits, and life-belt boxes. It eddies around the wings of the bridge, the masts, the funnels. Were it possible to photograph the path of air passing over a ship, it would surely resemble a tangled skein of yarn.

Streamlining of the ship will require first of all a unified superstructure with smooth contours that will tend to maintain the contact of the boundary layer. The boundary layer of a ship is approximately one foot thick, and it may seem facetious to be talking about its importance to an object as large as an ocean liner, but our only tenable streamline theory demands it. After all, the importance of the boundary layer is no more incomprehensible than the fact that a ship as large as a skyscraper and weighing approximately as much can be rolled to the serious discomfort of the passengers by a ten-foot wave.

Elimination of protuberances on the superstructure is a refinement of design which can be predicted with certainty. In combating high winds an entirely enclosed superstructure would be desirable for speed, comfort, and safety. In calm weather, when the air resistance would be a good deal less and maxi-

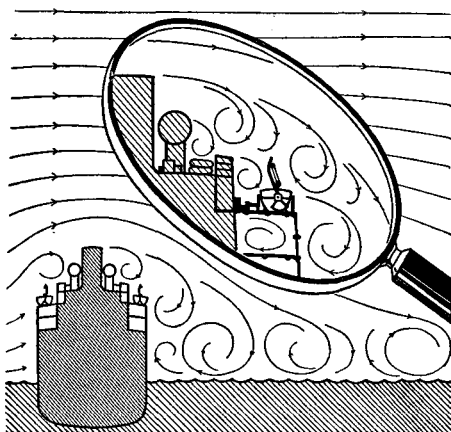


Fig. 7 — The superstructure of a ship causes turbulence of great magnitude with appreciable loss of power

mum streamline efficiency not quite so important, the skin enclosing play and promenade decks could be opened.

The proper streamline form of the superstructure as a whole, however, is most indefinite. During the time that streamlining has been kept waiting in the outer offices of the steamship companies, naval engineers have been determining the various problems with which it must cope. Their data have shown that the ship's problem combines the peculiarities of the airplane and the automobile and confuses them by a few of its own. The ship, like the motor car and the train, must contend with ground — or more correctly *water* — effect, and yet, because of the great height of the superstructure, it is probable that disturbance in the flow pattern of the air caused by water effect or action of waves becomes negligible as the air passes over the mammoth form of the ship.

The chief factor in ship streamlining is the cross wind. In the last four years it has been determined that a ship offers the greatest resistance to air when the resultant of the cross wind and the head wind created by the forward motion of the ship is about thirty degrees off the bow. A 50 per cent greater resistance may be encountered than when an equal wind is directly on the bow. This is a direct result of the larger area presented to the wind, and a more turbulent flow pattern.

There are indirect results of cross wind which further decrease the efficiency of the ship (Figure 8). In a cross wind, the motor car and the railroad train, being held to a straight path by the traction of the wheels on the road or rails, have only a *tendency* to drift. The ship, on the other hand, being in a fluid medium, has an *actual* drift. If the ship is to be held to its course it must be turned into the wind somewhat to compensate for the drift. An angle of yaw is created whose influence

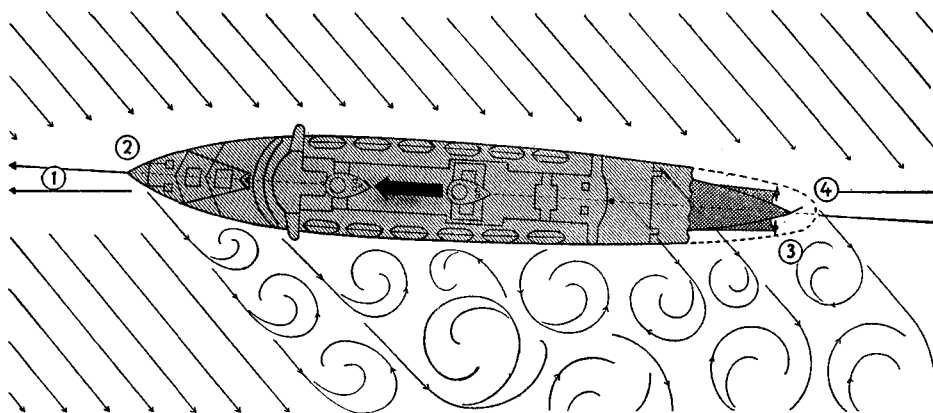


Fig. 8 — When the resultant wind is off the bow, power losses result from (1) yaw; (2) direct form resistance; (3) reduced propeller efficiency; (4) rudder resistance

on efficiency has recently been the subject of a study in England.

The yaw tends to force the ship through the water sideways — a difficult task at best. It requires that the rudder be carried continuously on the weather side — toward the direction from which the wind is blowing. This greatly increases the water resistance which the engines must overcome. At the same time the yaw causes the propellers to act at an angle to the direction of the ship's motion, and their efficiency is impaired.

It is dangerous to venture a prediction on the increased speed or fuel economy which may come from superstructure streamlining. We are more fully aware of the difficulties of the problem than of the benefits that are possible or the precise means of obtaining them. But it can safely be said that a fast transatlantic ship which cuts down head resistance and resistance to cross winds, thereby minimizing the losses which now spring from yaw, may be counted on to gain 8 per cent in speed. If it should choose to convert the higher efficiency into savings at slightly lower speeds, these might run as high as one fifth.

In addition to better performance there would probably also be an increase in carrying capacity. Since the

likely streamlined form of the superstructure would tend to be more tubular in a section than square as at present, the advantages of *monocoque* construction might well be turned to account. This would mean lighter and less expensive ships, greater cargo tonnage, and greater strength for bad going.

As the speed of ocean traffic becomes greater, the advantages of streamlining the superstructure will be more evident. The three-day crossing of the Atlantic is perfectly feasible. But it would be foolhardy to attempt it without first designing a ship which would encourage friendly behavior on the part of three thousand miles of boundary layer. Exactly how the boundary layer will be tamed is something to think about.

No one can say when the science of streamlining will pass the prenatal stage of organization and orientation. There is a long road but a bright horizon ahead of it. In 1894 Octave Chanute wrote as follows: 'Science has been awaiting the great physicist, who, like Galileo or Newton, should bring order out of chaos in aerodynamics, and reduce its many anomalies to harmonious law.' In spite of all that has happened since 1894, especially to the airplane, the science of aerodynamics, and streamlining in particular, are still awaiting the same great scientist.

FAREWELL TO RUSSIA

BY WILLIAM HENRY CHAMBERLIN

I

Moscow, *March* 1934. — Now that a new journalistic appointment is taking me away from Russia for many years, if not forever, I feel that I should try to set down how I feel about the country and the régime which I have seen at a very important stage of historical development. I have always had a cordial contempt for the 'Me and Russia' type of book or article. For an outsider to pay a fleeting visit to a country which has experienced such a tremendous upheaval and to see in it nothing but an annex to his own personality has always seemed to me to reveal a lack of sense of proportion that borders on impertinence. It is something like endeavoring to photograph oneself with Mont Blanc as a background.

At the same time no one with sensitiveness and imagination could live in the Soviet Union for more than a decade without feeling strong reactions of some kind to the dramatic events which have played themselves out on this huge stage. If the 'Me and Russia' type of reporter seems out of place, I am also unable to sympathize with the observer who looks on human beings, if they happen to be Russians, as anæsthetized guinea pigs or pawns on a chessboard, and sees in the 'liquidation' or wiping out of great numbers of them nothing but a necessary if perhaps unpleasant phase of an 'interesting experiment.'

There are certain aspects of Russia, which have nothing to do either with Tsarism or with Bolshevism, that have for me the greatest charm and appeal. Certainly few peoples are more naturally gifted than the Russians in many fields of art and culture. A century ago Russian literature was only beginning to exist; but who among authors in other lands can exceed Turgenev in rich, mellow, all-embracing human sympathy, or Tolstoy in epic breadth of scope, or Dostoevski in fierce dramatic intensity and psychological depth, or Gogol in sharp and salty humor? Equally impressive have been Russia's achievements in music, and in many branches of science. In the face of some particularly barbarous episode, past or present, I have sometimes been tempted to feel that the methods of Russia's rulers place it among the backward Asiatic countries, but I always return to the thought that its thinkers, artists, and scientists have won it a high place in European culture.

I have come to regard the pre-war Russian educated class as the most charming of its kind in the world, perhaps because it was younger, fresher, warmer, and stronger in its appreciation of the cultural values which other countries are too much inclined to take for granted. Among the masses of the Soviet Union, among the workers and peasants and people of all occupations

and of various races whom I have met in many trips through the country, there are qualities of hospitality, frankness, natural wit, friendliness to a foreign visitor, that leave the most pleasant impression. I enjoy some sides of Soviet life which are distasteful to many foreigners; I like the absence of a showy and gaudy night life in Moscow, and the sartorial freedom that is perhaps the only kind of liberty that does unquestionably exist in the Soviet Union.

II

When I first came to Moscow in 1922, my attitude toward the Soviet régime was more than friendly; it was enthusiastic. I sometimes look back with a shade of amusement to the rhetorical articles in praise of the Bolshevik Revolution which I published in radical newspapers and magazines at that time, animated, as I can see in retrospect, by little knowledge and much faith. And, if I am sometimes tempted to laugh at the outbursts of enthusiastic tourists, I must remember that in 1919 and 1920 my own attitude was very similar to theirs. How ready I was in those years to believe the most fantastic yarns of the well-disposed visitor returning from the Red Mecca of Moscow! And how I was inclined to denounce the mildest and most reasoned critic as a base traitor and defamer! Proceeding from the belief, which I still hold, that the World War was the supreme crime and folly of the century, I jumped to the conclusion, which I have long abandoned, that revolution on the Bolshevik model is the panacea for war and for all social injustice.

Not that I have completed the absolute psychological somersault which I have witnessed in some acquaintances who came to Russia avowed Communists and left the country expressing hopes for the complete overthrow of the

Soviet régime. For some achievements of the Revolution I have the sincerest respect, especially for its spread of education among the masses, for its policy of absolute non-discrimination among the races and nationalities of the country, for its exaltation of labor, for its promotion of health and recreation. I always come away from a workers' rest home or from a workers' club, situated perhaps in a former slum district, with a conviction that a vast amount of useful social and educational work has been and is being done under the auspices of the ruling Communist Party.

Industrialization was a reasonable goal for a country with the population and natural resources of the Soviet Union; and the Soviet leaders have certainly displayed tireless drive and energy in creating a network of steel and chemical plants, tractor and machine-building factories, and electrical power stations. The industrial progress of the country during the last few years is striking, even though one should bear in mind the fact, overlooked by some admirers of the Soviets, that pre-war Russia was developing its railroads and its industries very rapidly. I see no reason to doubt that the Soviet leaders and the majority of the Communist Party members believe sincerely in their cause and think they are working for the well-being of their country. I have repeatedly been impressed by the obvious devotion of the more idealistic of the Young Communists and of the veteran *podpolshchiki*, or former underground revolutionaries.

And yet, when one sums up all that can fairly be said about the constructive sides of the Soviet régime, there remains a formidable burden of facts on the other side. There is the permanent and odious system of terrorism and espionage. There is the decimation of the intelligentsia through secret arrests and banishments and most un-

convincing 'sabotage' trials. There is the subjection of the peasantry to wholesale deportations and to a 'military feudal exploitation' that reached its terrible and inevitable climax in the great famine of 1932-1933 — all for the sake of imposing on the peasants an alien and unfamiliar system which certainly has yet to prove its productive advantages.

How can one reconcile such apparent contradictions: establishment of children's nurseries and sending of some children, with their kulak parents, to Arctic wastes; setting up of technical research institutes and application of inquisitorial methods to scientists of world eminence? It is my personal belief that the Bolshevik Revolution and the Soviet régime which grew out of it can only be understood as an example of historical tragedy of the deepest and truest type, a tragedy of cruelty, of the crushing out of innumerable individual lives, not from sheer wanton selfishness, but from perverted, fanatical idealism — always the surest source of absolute ruthlessness. And behind this tragedy lie several conceptions which are implicit in Communist philosophy; and the longer I have seen these in practice, the more I have come to regard them as sentimental fallacies.

III

The first, the oldest, and the most demonstrable fallacy is the conviction that the end justifies the means. I think the overwhelming weight of historical evidence is to the effect that the means determine the end, and that an idealistic goal, pursued by brutal methods, has a tendency to disappear from view. Such major atrocities as the liquidation of the kulaks as a class, the state-organized famine, and the persecution of the intelligentsia have harmful results that go far beyond their immediate victims. They brutal-

ize the society that is taught or forced to look on them with indifference or even with applause. More terrible than the commission of these atrocities was the fact that no voice could be publicly raised against them in the Soviet Union. A distinguished historical novelist of the last century, Aleksei Tolstoy, in his introduction to his novel of the times of Ivan the Terrible, *Prince Serébrany*, writes: —

'I throw down my pen in indignation, not so much at the thought that Ivan the Terrible could exist, as at the thought that a society could exist which would look on him without indignation.'

I think there could be some very pointed modern applications of this statement.

A second sentimental fallacy of Communism is its virtual ignoring of the grave problems involved when the few men who must inevitably guide the whole political and economic life of the country, under the system of the so-called dictatorship of the proletariat, are granted enormous power with no kind of effective check or control. Lenin was so obsessed with the idea that 'capitalism,' the private ownership of the means of production, was the root of all human ills that he never seems to have foreseen the abuses, equally serious, if of a different kind, which might emerge when all power, political and economic, would be in the hands of a dictatorial state.

I have talked with few if any peasants in the Soviet Union who do not consider the Soviet state a harder taskmaster than the Tsarist landlord. Russia's whole experience, especially during the Iron Age, certainly indicates most vividly that the possibility of exploitation is not eliminated when factories and mines, banks and railroads, are transferred from private to public ownership. A dictatorial state may exploit — more than that, *has ex-*

ploited — workers and peasants alike, not for the sake of private enrichment, but as a result of blundering mismanagement, of grandiose ambitions for quick industrial and military expansion. Incidentally, I think it is decidedly improbable that the Soviet state, after arrogating to itself the most absolute power over the lives of its citizens, will some day obediently fulfill Lenin's formula and 'wither away.' Lenin could doubtless imagine an abstract conception, 'the state,' withering away. It is very difficult, after seeing the atmosphere of special privilege with which high Party, Soviet, and Gay-Pay-Oo officials are surrounded, to imagine this new ruling class, or caste, voluntarily merging itself with the mass of Soviet citizens and 'withering away' in any future, however distant.

The materialistic conception of history is a Communist dogma with which I am in vigorous disagreement. This effort to explain all human activity in terms of the play of economic forces seems narrow, inadequate, and unconvincing. It becomes positively ridiculous when there is an effort to explain a jolly overture by Glinka as 'Russian trade capitalism expanding' or a melancholy song by Tchaikovsky as 'Russian landed aristocracy in decay.' More serious than these amateurish experiments in artistic misinterpretation is the tendency to regard the individual merely as a member of this or that class. This impersonal approach is an easy road to pitiless hardness.

Then the practice of 'the dictatorship of the proletariat' in the Soviet Union has in it a large element of inverted snobbishness. Reasonable people would generally agree that labor with hand or brain gives one a title to respect. But I am quite unable to comprehend why work in a factory is intrinsically more ennobling than work

in an office, or on a farm, or in a research laboratory. By its avowed and systematic discrimination against 'non-proletarians' — that is, against non-factory laborers — in educational opportunity and in promotion in the state service, the Soviet Union is handicapping itself just as much as any state which resorted to some of the more familiar forms of class or race discrimination.

IV

One among many points of faith common to apologists of Communism and of Fascism is an overweening contempt for civil liberties, which are represented as unnecessary and inconvenient barnacles on the ship of progress. The longer I have lived in the Soviet Union, where civil liberties — freedom of speech, press, assembly, and election — are most conspicuously lacking, the more I have become convinced that they are of vital and tremendous importance, and that their existence or absence is as good a test as any of the quality of a nation's civilization. The Communist (or the Fascist — their trend of thought in this question is strikingly similar) talks of civil liberties as of the outworn fetish of a handful of disgruntled intellectuals who are unable to rise to the necessary vision of the high and noble character and purpose of the Communist (or Fascist) state. But my own observation in Russia has led me to believe that a great deal more is at stake than the freedom of thought of the educated classes, although it seems rather obvious that culture becomes impoverished when the historian must alter his record of the past, the author must give a prescribed coloring to his characters, and free research in any field can be cut off, at the will of an all-powerful state.

It was during my trip through the famine regions of Ukraina and the

North Caucasus that I became utterly and definitely convinced that democracy, with all its faults, weaknesses, and imperfections, is enormously superior to dictatorship as a method of government, simply from the point of view of the common man. Is there any recorded case in history where famine — not poverty or hardship or destitution, but stark famine, with a toll of millions of lives — has occurred in a democratically governed country? Is it conceivable that the famine of 1932–1933 could have taken place if civil liberties had prevailed in the Soviet Union, if newspapers had been free to report the facts, if speakers could have appealed for relief, if the government in power had been obliged to submit its policy of letting vast numbers of the peasants starve to death to the verdict of a free election? The countless graves of the humble and obscure famine victims, the peasants of Ukraina and the North Caucasus, of the Volga and Central Asia, are to me the final grim, unanswerable refutation of the specious Communist contention that freedom of speech and press and political agitation is only humbug by which the bourgeoisie tries to delude the masses.

If I have one wish for the future of a country where I spent many of the best years of my life and for whose people I feel only the warmest friendship, even though I disagree so strongly with many of its present-day political, economic, and philosophical beliefs, it is that somehow a little leaven of doubt and skepticism may filter into the pure yeast of Communist dogma. It is not a matter of discarding methods that prove ineffective; any ruling group with elementary capacity for governing will do this. It is a question of coming to believe that there might be a one-per-cent chance that the fundamental dogmas of Marxism and Leninism are wrong, or at least that they

represent, not infallible truth, but a working hypothesis, to be verified by trial and error.

I believe that the progress of civilization in Russia will go hand in hand with the progress of skepticism. When the Communists are no longer so self-righteously certain that they are leading the country to a future millennium, they will perhaps not be so ready to impose on it some of the characteristics of a present-day purgatory.

V

Barring war, the stability and the continuity of the Soviet régime seem quite assured. The very magnitude of the hardships and sufferings which it has imposed on the population in the name of industrialization and collectivization is, in a sense, a testimonial of its strength, of the invincibility of its highly developed technique of government by means of a combination of propaganda and repression against any forces of internal discontent. War is the unknown factor which may confound all predictions about the future of the Soviet Union, or, indeed, of almost any other country. The Bolshevik Revolution was a child of the World War. Although there were many elements of weakness and decay in the Tsarist system, the Russian Revolution would probably have taken a very different course if the war had been averted or indefinitely postponed. In such a case the propertied peasantry which was emerging as a result of Stolypin's agrarian legislation would have had a far stronger voice in shaping the course of events. Successful war is the sole means by which Communist revolutions are likely to be promoted in other countries. Unsuccessful war is the only conceivable means by which the Soviet edifice might be suddenly and violently overthrown.

Assuming that the Soviet Government does not become involved in war, what should I expect to find if I should revisit Moscow in 1940? There would probably be some improvement in material well-being, although the majority of the people would still be overcrowded and underfed. Perhaps by that time meat and milk and butter and fruit would be as easy to get as they were in 1925 or 1926. Moscow's subway would presumably be in operation, with a consequent relief for the hopelessly overburdened street cars. Its first period would perhaps be marked by a few collisions and other accidents, which would not be mentioned in the newspapers, while their casualties would be much exaggerated in popular rumor. The Gay-Pay-Oo would have ceased to exist — under that particular name. Its functions of spying, arresting, and deporting undesirable Soviet citizens would be carried on by an organization with a more innocent title, which would include all the veteran officials of the Cheka and the Gay-Pay-Oo, but which might, in deference to outside opinion, have given up the practice of shooting people without any kind of public trial.

Going into the country districts, I should hope and expect to find no more evidences of recent famine and no acute food shortage, except perhaps in years of severe drought. On the other hand, I should be very agreeably and very much surprised if I should find the majority of the collective-farm members enjoying a standard of living which a West European or even a Baltic or Balkan peasant would regard as well-to-do. The individual collective farms would probably have gained more autonomy; the dictatorial control over the farms now exercised by the machine-tractor stations would have proved in practice unwieldy and uneconomic.

By 1940, rationing would probably have disappeared or have considerably diminished in scope; one result of this would be that the Soviet ruble would have assumed more of the normal functions of a genuine unit of currency. Real wages in the Workers' Republic would still be extremely low, and discreet inquiry in the proper quarters would probably reveal that possessors of foreign currency could obtain a very different rate of exchange from that quoted in the State Bank.

The shops would have assumed a more Western appearance; more automobiles and buses would be coursing about the streets; the traffic policeman would perhaps be the most overworked man in the Soviet capital. There would be a brand-new crop of anecdotes, mostly centring around the subway, the real or alleged architectural defects of the Palace of Soviets, and the accidents of the infant Soviet automobile industry. There would still be some dutiful talk about the Soviet proletariat as the vanguard of the World Revolution, but that happy event would have visibly receded, in popular expectation, to a vaguer and vaguer future.

A certain type of American or English business man would be holding forth in the bar of the Metropole Hotel on what a wonderful market Russia would be if the governments at home could only see the light and advance considerable sums of the taxpayers' money in order to enable the Russians to purchase more of the goods which the business man was interested in selling. A hard-bitten engineer, just returned from a copper smelter in the Altai Mountains, would inject the 1940 equivalent for 'Oh yeah?' — accompanied by a profane and vivid description of what was wrong with the copper smelter. Enthusiastic tourists would be packing up to return to New York or London, all ready to

lecture on how Russia, in all Europe, was the sole country with Hope and a Plan.

VI

The three long-term trends in Soviet life which seem to me most significant at the present time are greater stabilization, growing nationalism, and increasing material inequality. A dominant feature of Soviet life since 1928 has been the crisis of agrarian production, which at its height reduced the town population to a very meagre food supply and caused famine in many country districts. There was a turn for the better in 1933, and, while unfavorable climatic conditions may further delay a process of agricultural reconstruction which is bound to be slow and difficult in any case, the probabilities are that the extreme low point of the agrarian crisis has been passed.

The peasants have more or less reluctantly resigned themselves to the collective-farming system which has been forced on them so ruthlessly. The Soviet Government, on its side, seems to have given up the idea of pressing the peasants into full-blooded communes and is lavish with its promises of more manufactured goods. The struggle between the government and the peasantry, which reached its most ferocious form of expression in the famine of 1932-1933, is not over. It cannot be over until the peasant obtains more freedom in determining the conditions of his labor, more voice in disposing of his products, a fairer share in the national income. But it will probably go on now in milder forms, which will not be so destructive to agricultural productivity.

With an easing of the agrarian crisis has come an abatement in the persecution of the intelligentsia, although the position of the Soviet engineer is still far from normally secure against

arbitrary arrest.¹ The thoroughgoing reform of teaching methods in the schools, the restoration of history and geography to places of honor in the curriculum, the increased emphasis on the value of the literary classics, the tendency to curb the sillier excesses of 'Marxism in Geology' and 'Leninism in Medicine,' the appearance of more goods, even at high prices, the new toleration of dancing — all these varied manifestations point to some relaxation of the more extreme rigors of the first years of the Iron Age, to an era of greater stability, of less violent change. In the same direction is the present tendency to shape plans more realistically, to curtail extravagant and impracticable projects, to shift the emphasis from quantity of output in industry or of acreage in farming to quality of production and of tilling.

The more pronounced nationalism of the Soviet Union finds its clearest expression in the much more active foreign policy which the Soviet Government is pursuing. The time is gone when the Soviet Union maintained the attitude of standing alone on a Mount Sinai of revolutionary virtue, self-righteously refusing to take part in the intrigues and combinations of wicked capitalist powers. Litvinov at Geneva, in May and June, 1934, acted precisely as a Tsarist Foreign Minister might have done, endeavoring to strengthen the bonds of alliance with France on the basis of common antagonism to a resurgent Germany. The Soviet press, instead of keeping up the old Bolshevik tradition of pouring out vials of wrath and contempt impartially on all 'capitalists and imperialists,' takes sides passionately with

¹ In the spring of 1934 it was found that in many mines around the new coal town of Prokopyevsk, in Siberia, half the engineers and technicians had been subjected to prison sentences, often for trivial or imaginary neglect of duty, and were working in the status of convicts. — AUTHOR

France and denounces Germany and England — very much in the style of the controlled press of any other nationally-minded dictatorship.

This plunge into active international politics is almost certain to handicap further, if not to paralyze completely, the activity of the Communist International. The Soviet Government cannot very well propose pacts of mutual aid to France and at the same time permit an organization on its territory to encourage French soldiers to mutiny and French workers and peasants to rise in revolt.

As a Great Power, the Soviet Union has 'arrived'; American recognition and the increasingly close working understanding with France, the strongest European military country, are the best proofs of this. But it has not 'arrived' in a revolutionary sense, in the sense of which Lenin dreamed when he wrote: —

The victory of socialism is possible in the beginning in one capitalist country. The victorious proletariat of that country, having expropriated the capitalists and organized socialist production in its own country, would rise against the remaining capitalist world, attracting to itself the oppressed classes of other countries, arousing them to uprising against the capitalists, coming out, if necessary, even with armed force against the exploiting classes and their states.

This nationalism is visible also in the internal life of the country. A decade ago excessive devotion to his own country was regarded as bad form in a Communist, as savoring of indifference to the international revolution. A Communist woman said to me at that time half apologetically: 'I love Russia more than a good Communist should.' Now Soviet patriotism is trumpeted in all the newspapers; such phrases as 'our beloved socialist fatherland' and 'our great country' are very familiar. And *Pravda*, official organ of the Com-

munist Party, recently indulged in a sentimental outburst that might well have appeared in an Italian Fascist or German National Socialist newspaper: —

Our children now suck in love of fatherland with their mothers' milk. . . . The people of Russia now love the soil on which they were born, where they spent their childhood and youth, and which holds their future; the sky under which they grow and develop; the sound of her winds, her proud mountain heights, her shady forests and swelling rivers; the seas and oceans washing her shores; her songs and her language.

This Soviet patriotism, it should be noted, is not associated with Russian chauvinism; it still remains one of the most admirable characteristics of the Soviet régime that no discrimination between the nationalities inhabiting the Soviet Union is tolerated, and that no one — provided, of course, that he is an orthodox Communist — is debarred from rising to any post in the state service because of his nationality or the color of his skin.

Of course the conviction of an international Messianic mission for the Russian Revolution will die slowly; there would doubtless be an effort to utilize Communist propaganda, along with airplanes and poison gas, against any country with which the Soviet Union became involved in hostilities. There is an effort now to give an international twist to every piece of domestic construction; to represent a new locomotive as a 'reply to the Pope' and a new steel plant as a blow at the world bourgeoisie. But the Soviet leaders have perhaps already realized in their hearts, and the masses will some day realize, that new building in the Soviet Union will no more convert other peoples to Bolshevism than Mussolini will win converts in other countries to Fascism by draining Italian marshes or Hitler to National Socialism by creating new roads.

A permanent growth of material inequality would seem to be the inevitable result of the strident propaganda for unequal wages, for higher compensation for persons in more responsible posts. Russia's experience in the long run will probably show that approximate material equality can exist only in a very primitive community or in an extremely poor country. Every step forward from the bleak deprivations of the first part of the Iron Age will mean less equality. The high state official, the 'Red director' of an important factory, will get the individual automobile — in time, perhaps, the private house — which the skilled worker cannot have; and the skilled worker will get the radio set, the camera, that his unskilled fellow cannot afford to buy. One of the probable future paradoxes of Russia will be that, just about the time when classes have been officially abolished, new classes, based not on wealth or birth but on power, on status in the huge hierarchy of state officialdom, and distinguished by very different standards of living, will become much more visible.

The Soviet Union is becoming much more involved in world politics. There is little reason to believe, however, that it will become more tied up with the world economic system. All the signs point to the development in Russia of a self-contained economy, which will grow up out of its own resources and by its own efforts, with slight benefit of foreign capital. This will make Russia's industrialization more painful for the population than would otherwise be necessary. But at a time when defaults, moratoria, and frozen credits are the order of the day in capitalist countries, it does not seem probable that there will be any rush of adventurous capital into the Soviet Union.

The Soviet régime has been con-

tradictorily interpreted to the outside world as a menace, a challenge, an inspiration, and a laughingstock. I should not subscribe unconditionally to any one of these sweeping interpretations, although, like all big historical movements, the Bolshevik Revolution has its separate aspects of horror, of heroism, and of absurdity. The Soviet system may be considered the most dramatic and most spectacular effort to solve, along new lines, what seems likely to be the major social problem of the twentieth century: to ensure economic security for the masses while preserving a reasonable measure of liberty for the individual.

VII

That the Bolshevik method of solving this problem by completely destroying individual ownership of property, and placing the whole responsibility for the economic as well as for the political administration of the country in the hands of an absolutist state, will be imitated in other countries seems highly unlikely. I remember quite vividly the moment when I definitely came to feel that Bolshevism would never conquer Western Europe or America. It was in the autumn of 1930, when I was spending a vacation in the Austrian Tyrol.

A procession with bands and music was passing through the streets of the little mountain village. The marchers were mostly local peasants in holiday costume, with green coats and feathers stuck in their hats, and every man had a rifle slung over his back. As it happens, I had made a trip through some collective farms in the Lower Volga just before leaving Russia; and as I watched the Tyrolean peasants, who looked like worthy descendants of ancestors who put up such a magnificent fight against Napoleon, march swinging past I thought of a very

different scene which I had recently witnessed in a Lower Volga village. A local Communist official there had been telling the peasants how much grain they had to give up, what quotas of milk and meat would be taken away from them, what they had to plant and how they had to work in the collective farm. The peasants grumbled, sometimes cried out in protest at the amount of the requisitions; but one felt that with their serf tradition, and with the stern lesson of the liquidation of the kulaks before their eyes, they would submit. But a Communist grain collector, even if he had brought a regiment of Gay-Pay-Oo troops with him, would have had a hard time in that Tyrolean village. One felt that Austrian peasants would have turned their mountain valley into a cemetery before they would have submitted. And I certainly doubt whether forcible collectivization would have better chances of success with the farmers of Kansas and Nebraska, or with the French peasants whose Revolution, in contradistinction to the Russian, really did give them the land.

And the landowning peasantry and farmers represent only one of many stumblingblocks Russian Bolshevism would encounter in other countries. So what seems most probable is that the Soviet régime is destined neither to serve as an ultimate model for the rest of the world, as its admirers believe, nor to go down in violent ruin

and destruction, as its enemies hope. Barring the ever-unpredictable contingencies of large-scale war, the system will eventually stand in its main features, subject of course, like other systems, to evolutionary modification and change. It will be the Russian solution of a problem which has already been solved in different fashion in Germany and in Italy, and which will doubtless in time find further solutions, varying with national temperament and economic circumstances, in America, England, France, and other countries. The failure of the pre-war economic system to regain its old balance, to function in the traditional automatic fashion, seems to mark out for every country a greater measure of state control and state regulation of its economic life. But how this control and regulation will work out in practice will probably vary from country to country as greatly as Russian historical development, for instance, varies from British, or German from American. That the Russian solution should at once have proclaimed the most glowing and ambitious ideals and should have taken the greatest toll of human lives and human suffering is certainly in full harmony with certain traits of Russian temperament (extremism, lack of the instinct for relativity and moderation, contempt for the individual personality) and with that Russian past which so often casts its long shadow over the Soviet present.

AUTUMN EVENING

HERE is a world where everything is shifting,
A fading world beneath the fading splendor
Of evening earlier than yesterday,
Darker and earlier. The night too soon
Chilling an earth still stubble-warm with summer
Settles like dust, like death, upon these meadows.
Cool light slips over them, light still slips over
On slowly flowing air; brightness still brims
Clear pools of air between the drifting shadows,
The leaf's edge and the cloud's edge still are bright,
But all is darkening, all will dim and darken
And ebb away to evening, ebb to autumn.
Without a sound, without a lapping ripple
Summer flows past, flows out upon the wind
Under the darkening sky. A flight of shadows
Up from the ground takes wing, and in the branches
Dark shapes among dark boughs give out a cry,
The windy cry of crows, as if the autumn
Spoke in their throats, a sound of cold and darkness,
The sound of winter wind in leafless woods.

JEAN BATCHELOR

SUMMER AMONG THE VARMINTS

BY WENDELL BROOKS PHILLIPS

I

I WAS desperately tired of people — even the benevolent and harmless people with whom I usually associate. It was n't that they had n't been nice to me. Old ladies had lured me to church socials with tales of cake icing an inch thick. Members of the Kiwanis Club heard that I had inherited a splinter of walnut wood from the house in which Stonewall Jackson was born — and they begged me to give them a lecture on the great general's mother. Pretty freshman girls had drawn confidentially near at conference hour and had coaxed: 'Now, Professor, please tell me *all* about Anatole France. Just *why* did he write *The Red Lily*?' But in spite of these kindnesses I was tired of human society. It was ungrateful of me, it was unnatural, — possibly a bit depraved, — but there it was.

In this mood I came to my irretrievable decision. I would spend a summer among the varmints. Not as a skilled naturalist — because I am not one. Nor as an amateur naturalist — they rush around so. Nor as a poet — poets are so apt to sentimentalize. Not even as a humanitarian — having lived forty years, I find it impossible to be humane. No — as long as I was to live among the varmints, it should be as varmint to varmint, tooth to tooth and claw to claw. If I managed to get them first, I would plant my foot on their chests and give a Tarzan-like roar of triumph; if they got me — well, it

would be just too bad. Since I have never allowed myself to be encumbered by property, I should n't even have to make a will.

But suddenly I am appalled. Somewhere in the far corners there may be a reader who does not know what a varmint is. Here in Georgia, everybody knows. Tales of varmints are whispered to babes in a thousand chimney corners. They are a part of the common heritage. But what of those readers who dwell in the hinterlands, in Minneapolis or San Francisco, — unquestionably worthy people, many of them, — what shall be done for them? I must do something.

I pull down the V-Z volume of the New English Dictionary. Nobody shall say that my work is n't based on a foundation of the most solid scholarship. Messrs. Murray and Bradley, Craigie and Onions, they will know. Here it is: varlet . . . *varmint* — dialectal variant of *vermin* — 'an animal of a noxious or objectionable kind.'

I sigh deeply. All the facts, the earliest sources. But it is immediately clear that these learned editors, from the seclusion of their Oxford cloisters, have never grasped the soul of varmintry. (Oh, joy! I've put one over on them! Until this moment there was no such word as 'varmintry,' and now that there is, they'll have to put it in the next edition. I simply dare them not to — and of course they'll have to

quote me as its only source. I never dreamed I was so clever!)

But I fear I digress. 'Never grasped the soul of varmintry,' I was saying. How could they? The word is strong, racy, full of flavor. Not the same as the New England 'critter.' Even a cow is a critter, but not by the remotest possibility could a cow be a varmint. A varmint is cunning, wild, and vicious, and his habitat is confined to the Southern Appalachians. Imagine calling a lion a varmint! A possum or a rattlesnake is a varmint; but a hartebeest, an emu, or an okapi — never!

II

Strengthened by my resolution, I bade an affectionate farewell to the freshmen — who, for all they knew, might never see me again — and took to the headwaters of the Chattahoochee River. Just at the foot of the mountains the river bottom broadens into a beautiful little valley called Nacoochee — the 'vale of the evening star,' according to the Cherokees. The river casts up bits of Indian pottery, and the whole place simply reeks with legends of Indian princesses. But I determined not to pay the slightest attention to them; I could n't let my summer be spoiled.

Overlooking the river, with its rich vegetation, is a little knoll on which stood a rough-built shack, with wooden shutters for windows. A bit of screen wire, a dash of soap and water, a dish, a table and a bed — and I was equipped. The knoll had once been cleared and then abandoned. In place of the forest had grown up bewildering thickets of dogwood, service berry, tulip, black locust — a varmint paradise if ever there was one.

Did I immediately proceed to hunt varmints? I did not. Those people who go out with a butterfly net, a pair of tweezers, a bottle of poison, and a

magnifying glass hardly ever have any luck. By hunting for something definite, they simply court disappointment. A butterfly net or a shotgun is palpable warning to any intelligent varmint that the game is on, and you offer him every opportunity to escape and then gloat — or even bite you while you are untangling your paraphernalia. The method is crude, and I had no sooner thought of it than I discarded it. I use the indirect system, or, to speak accurately, the modified-indirect.

My plan was to pretend — even to assume — that I had no interest in varmints. I would set about making the knoll a beautiful and habitable place. It already had the river, the mountain view, and the woods at its back. All it needed was a thinning and cherishing of the wild and tangled thicket. I would cut down the briars and weeds. Where six tulip sprouts sprang from an old stump I would trim out five and leave the finest. Where a dogwood and a black locust struggled for room, I would exercise a discerning eye, a finely discriminating taste, as to which should live and which should perish. The job would take all summer, it would harden my muscles, and it would afford the utmost leisure for sweet and gentle meditation. If varmints came, it would be by the grace of God. No matter what happened, I could n't lose.

III

As I began work, on a blazing hot day in June, I chuckled to remember that I was practically immune to the smallest but most viciously ubiquitous of all Georgia varmints — the chigger. And here I must again digress. In doing so, I would beg my reader's forbearance — his sympathy. De Quincey, you will remember, had the same difficulty, but it did n't bother him. He was built that way and did n't seem

to mind it. But my nature is simple and straightforward, and these digressions pain me. I fall into them only through the utmost necessity. So many readers are unacquainted with chiggers. There is a great blank in their lives, and if I pause not to fill it, probably nobody ever will.

'Chigger,' I learn, is a corruption of the West Indian 'chigoe' (so many of our best words seem to be corruptions), a creature which burrows in the feet of sugar planters and causes them to lose toenails which otherwise might have lasted for years. Well, this West Indian monstrosity is *not* the chigger I am talking about. The Georgia chigger is a minute red mite, so small that only the keenest eye can see him, who lies in wait on every blackberry bush and rotten log, who bites with the utmost tenacity, and is considered a major pest by those who have not made their bargain with him. The bite is less immediately annoying than that of a mosquito, but more lasting.

The upper classes try to mitigate his evil by euphemistically referring to him as a 'redbug.' One's social standing in Georgia is often determined by whether he says 'redbug' in a languishing tone, or 'chigger' with a sharp, bold accent. But, being a semi-Yankee, I defy such classification, and choose 'chigger' because it sounds so much more 'varminty.' (The Oxford Dictionary already has that one. See Supplement.)

Now, to get back to the main path. As I was saying, chiggers never bother me. They don't like my flavor. It came about in the following manner. When my parents came from the North, I was a tender babe of less than a year. One day a sudden impulse struck the entire family to go into the hills after huckleberries, the only trouble being that I could neither be left at home nor be utilized as a picker. My older brothers solved the difficulty by tying my foot to a bush so I could n't

roll down the mountain, and leaving me until their pails were filled. All was well until the next day, when everybody was grievously tormented with little red bumps and an intolerable itching.

'Some sinister tropical disease,' surmised my father, and sent for Old Jim Roberts, who lived in a tenant house on the edge of the place. Old Jim shuffled into the yard, followed by his two boys, Good Truck and Sonny Darlin', and his little girl, Pet Bird. As soon as our symptoms were displayed, Pet Bird and Sonny Darlin' began to grin, and the glow of amusement slowly spread to Good Truck and Old Jim himself.

The old man accurately centred a morning-glory blossom with a jet of tobacco juice. 'Them's chiggers,' he murmured. 'I love to keep a few of 'em about me — hit feels so good to scratch. But that-thar baby shore has got a dose of 'em. Could n't hardly put one chigger betwixt another. Rub hits little hide all over with a salty bacon rind. That 'll kill 'em.' And Old Jim ambled away, promising to send up a bacon rind if we did n't have one.

Of course I hardly remember this incident, but I have it, word for word, on authority which I cannot doubt. And from that day to this I have been taboo to chiggers. At the first nibble they turn away baffled. An acquired immunity — toxin antitoxin — pseudo-anaphylaxis — the doctors could explain it.

IV

Thus it was with a serene spirit that I began work on the knoll. Free from chiggers, I could centre my faculties on varmints of a higher kind. A mere glance at the pages of Mr. Ditmars (that genial naturalist who first made me varmint-conscious) convinced me that I was completely surrounded by almost innumerable creatures for whose bite there was no adequate remedy.

Amid this chaos, there was one solid thought: I could eliminate the lizards. 'The Eastern United States has no poisonous lizard,' says Mr. Ditmars soothingly. So I ignored them all, including the big ones with red heads and blue tails, which the inhabitants of the valley had assured me were as 'pizen as a rattlesnake.'

But could I so ignore that small but sinister spider, *Latrodectus mactans*? The genus *Latrodectus*, declares one authority, is feared all over the world, being far more deadly than the big tarantulas. And our American variety, found all over the South, is the only really dangerous spider in the United States. Known to the common herd as the 'black widow,' she varies the glossy jet of her body and legs only by one brilliant spot on her under-abdomen — a spot of orange-red, shaped like an hourglass. This signifies that the hour of whatever person she bites has come. (Not quite that, the local doctor assures me. He has treated three cases, and none of them died. There was merely a week or two of high fever, delirium, acute pain, and partial paralysis.)

The worst of this spider is — she lurks! She never comes out to greet the morning sunshine. Under damp mosses, under old, crumbling stones she sits, surrounded by drops of midnight dew. Certainly I should do wisely to keep her in mind.

And I kept her in mind almost too well. It was a characteristic failing — to be thinking so intently of imaginary varmints that I should forget the real ones. As I worked my way into the tangled growth of the knoll, I caught sight of an object which delighted me — a lovely little holly bush. But it was terribly choked with weeds and briars. With my heavy bush hook I cleaned out the largest ones, and then stooped with my pruning shears to do the more delicate trimming. As I was cutting

the last weed I sprang back with an involuntary gasp. Beautiful, sinuous creature! Coiled at the foot of the holly bush, his head within six inches of where my hands had been working, was an immense copperhead. Why he had not struck was a mystery, for these snakes are notoriously treacherous and ill-natured, quite unlike their gentlemanly cousins the rattlesnakes, who are reluctant to bite, and give loud warning. I stood and admired his bronze and ivory pattern — for richness and good taste, undoubtedly the handsomest snake in America.

But he had other plans than merely being admired. Imperceptibly, and with his eye steadily fixed on me, he started to glide toward the root of a hollow stump. I blocked the hole with my hoe, and called for the boys to come and see. They came with a rush — Bobby and Wendell and Richard. The boys had discarded shirts and hats for the summer, and the bronze of their backs was like the bronze of the copperhead. There was a quick discussion of plans. Richard wanted to smash the snake with a rock. Bobby favored catching him alive. But Wendell howled them both down. For his fifteenth birthday he had just received a .22 rifle, and had n't yet managed to shoot anything or anybody. The prospect of fleshing his maiden gun on a live copperhead was simply too ravishing. Besides, he wanted to test the assertion of the old inhabitants that it was impossible to shoot a snake anywhere but in the head — the alert reptile would strike at the bullet and catch it in his mouth. But the presence of so many people must have got our poor copperhead rattled; he missed the bullet entirely. In fact he missed half a dozen more; and it was not until the boys had exhausted several rounds of ammunition that he breathed his last. So far as I could tell, his head was still intact.

Wendell put on that patronizing and

protective look which only a boy in his teens can assume: 'Dad, he might have got you. Really, you have n't much sense, you know. In the future you want to look out.'

V

That evening at twilight the knoll was peculiarly peaceful. We had all had a swim and had eaten our supper. I was attracted to the hollow which dipped down to the river — an almost jungle-like growth of vines and creepers which festooned the pine trees. I would lie down on this rich mould, inhale its fragrance, wait for the darkness with its screech owls and whippoorwills. In my dreamy mood I could neither hate nor fear the varmints. I would put down my safeguards, I would surrender and be one of them. I rather owed it to them — we had taken advantage of the copperhead. So I drew the deep earth to me, as a blanket. Pine needles dropped on my face, wings fluttered past.

Should I also find a rattlesnake on the knoll, I wondered? The mountaineers told such piquant tales about them! Hardly a family but had a great-aunt who as a child had been 'charmed' and led away into the forest. Then there were all those babies who were mottled 'jist exactly like a rattlesnake' because their mothers had been snake-frightened as they hoed in the cornfield the day before the babies were born. I determined at all costs to find one of these spotted babies — only to discover later that they had all moved into the next county, or across the mountains.

From thoughts of rattlesnakes I slipped into wonder at the smells which darkness drew from the earth. The pine trees could breathe now, the ferns lift up their heads. I had never known such luxurious peace.

By chance I remembered Thoreau,

and Stevenson's pigeonholing him as an ascetic. Thoreau, said the author of *Familiar Studies*, drank no wine, smoked no tobacco, loved no women. What nonsense! The canny Yank would chuckle if he could know how he had eluded the canny Scot. Thoreau and all his disciples are really finely tuned epicures. We make no other claim — we do those things which *to us* bring delight. There is as discriminating a connoisseurship with regard to the delicate exhalations of a summer night as there is in the varying fragrance of French wines. . . . Pleased with my thoughts, I sank into a deeper fold of the darkness and went to sleep.

I was aroused by Wendell with his flashlight. Having found I was n't in bed at midnight, he had come to hunt me up.

'Dad, you're crazy! I'm moderately brave myself, but I would n't want to sleep alone in a place like this.'

I stumbled drowsily against a stone. 'Bring that rock,' I said, a bit irritably, 'and put it on the wall I'm making. It never pays to waste a trip.'

Wendell turned the rock over reluctantly, and then yelled with surprise. 'Just look at this *Latrodectus mactans* — with a whole sackful of little *mactanses*!'

Sure enough, there in the glare of the flashlight was the black widow with her ill-gotten brood around her — vermilion spot, midnight dew, and all. At the entrance to her den was many a carcass of bumblebee and hornet, each larger than herself. Obviously she was a lady of prowess.

'Pity we have n't got some alcohol,' said Wendell. 'I'd like to keep them.'

'We have. Go into the house and bring a pickle bottle half full of "white lightning." That'll do the trick.'

And so the *Latrodectus* family went to their fate in that peculiarly potent corn whiskey of the mountaineer, a

quart of which I had been saving in case I should be taken with rheumatism on some rainy day.

VI

During the long month of July, nothing happened. There was a portentous calm, as if the summer gathered its forces together before plunging into dog days. In Georgia, dog days are a wholly unpredictable season. Anything is apt to happen. The hot fields reek, corn stalks whisper as they race upward to their final height, watermelons burst open on the vines. Ragweeds outdo themselves, hay-fever victims rush around in circles and go mad. Children break out with sores and old folk mutter into their beards. The Dog Star glowers balefully in the morning sky, the signs of the zodiac chafe in their orbits, or snap at each other in the almanac. If one can live through dog days he is apt to survive for the rest of the year.

But perhaps the varmints were immune to dog-day madness. Perhaps they were not. At any rate, I was taking no chances. As I went to work on the last shoulder of the knoll I anxiously peered into each clump of bushes before attacking it. To tell the truth, the copperhead incident had made me less confident of my own astuteness. I had always scorned people who let themselves get snake-bitten as unobservant fools. But the protective coloring of both copperheads and rattlesnakes is so perfect that ordinary watching is of little use. I would put on the super-keen eye of the Indian or the pioneer.

Again, however, the varmints made a fool of me. As I thrust my pitchfork into a clump of weeds, from my very feet came that dry, singing rattle — so like the song of the cicada, so entirely different from it. It is a sound which penetrates beneath all civilized emo-

tions and all conscious thought to those reflexes which kept us alive during the ages when we had no thoughts. Without knowing it, I had taken a long spring backward, chagrined to realize that the snake could easily have sprung first. He was dextrously coiled, his head swaying gently, his tail in the centre vibrating so incessantly that it made a blur to the eye. And as with the copperhead, the predominant impression was one of beauty. Irregular, transverse bands of yellow and black — lustrous and soft, like rare old leather. Both color and form seemed to ripple, scale on scale, at the creature's slightest movement.

At the cry, 'Rattlesnake!' the boys went mad. It had already been determined that we should take him alive. A stout wooden box and a long pole with a noosed string at the end were quickly assembled. Each of the boys had a try at slipping the noose over the snake's head, but he evaded them with almost contemptuous ease. Finally we resorted to a trick. I enlarged the noose, and left the lower portion motionless on the ground. The boys got behind the snake and shooed him along with a stick until he began to crawl through my noose. When he was a third of the way through, I jerked my string tight, raised the pole, and we had our rattlesnake, intensely angry and startled, writhing and thrashing in mid-air. Within ten minutes he was safely stowed in his cage with its wire-mesh front, and we proudly placed him on the porch of the shack.

'Oh, boy, but this *is* luck!' gloated Wendell.

'One of the pit vipers,' observed Bobby learnedly. 'I can see the pit now — halfway between the nostril and the eye. Is this *Crotalus horridus* or *Crotalus adamanteus*?'

'*Horridus*,' replied Wendell. 'Dit-

mars says that *adamanteus* is confined to the gloomy and awful swamps of the lowlands. But *horridus* is really the kind I like. Five feet if he's an inch.'

'There are two things he's got to have,' declared Bobby meditatively. 'Something to eat, and a name.'

'He takes only warm-blooded, living prey,' quoted Wendell. 'Dad, if you'll name him, we'll get him some prey. Come on!'

'His name,' I retorted, 'is Lucifer. Observe his sulphurous, deadly splendor—'

'Lucy!' they shouted, all at once. 'A magnificent name!'

'Not Lucy,' I replied in horror, 'Lucif—!'

'Lucy! Lucy! His name's Lucy!'

And Lucy it remained — with, however, neither Wordsworth's permission nor mine.

VII

The responsibility of feeding Lucy was heavier than we had supposed. The boys brought him a mess of delicious, pink, newborn mice, fresh from the cornerib. But Lucy disdained them, and allowed the ants to carry them off, bit by bit, from under his very nose. His temper was daily getting worse. When anybody passed his cage, especially our dog Mack, against whom he had formed a prejudice from the very beginning, he would set his rattle going and launch himself against the screen with incredible speed. On several occasions, drops of amber-colored venom were ejected on to the floor. If Lucy were not fed soon, we feared for his sanity.

And intermingled with this worry was the problem of Lucy's ultimate disposal. We received a visit from my two young and innocent nieces (I still think of them as innocent, though they have been married for three years, and have each acquired two university

degrees) — a visit from my two nieces, who make some pretensions as rattlesnake experts. They hooted at the notion of providing food for Lucy. Why not eat *him*? And then they told a brazen tale of how they had slipped up on a rattlesnake in the mountains, rolled him in flour, tossed him into a frying pan, and served him to their husbands — who, being hardened young candidates for the Doctorate in Philosophy, suffered no ill effects. I began to see merit in their immodest proposal, reflecting that if Eve had brought her serpent to Adam in a frying pan, instead of accepting his advice about the apple . . .

But the boys declared that Lucifer should have one square meal if they had to devote their lives to it, little knowing that he was shortly to be fed as the ravens fed Elijah. As it turned out, the food was sent.

We were sitting in the shade of the house, peeling peaches to be canned. First Bobby, then the rest of us, saw a half-grown wood rat, brown and glossy, emerge from the thicket. He sat up on his haunches, panting as if out of breath, staring as if oblivious of the world. I half wondered if Lucy was 'charming' him — though naturalists assure us that snakes do not hypnotize their prey. But Lucy's cage, while comfortably near, was not facing the rat. The two creatures could not see each other.

Bobby rose silently, deftly threw his handkerchief over the indifferent rat, and popped him through the door of Lucy's cage. We expected to see an instant execution, but Lucy sullenly turned his back, and the rat settled down with no particular alarm in the opposite corner. After three days of this I was reduced to providing bread and cheese for the rat — who partook of them heartily. Both snake and rat evidently drank from the same water dish, though not at the same time.

The boys hardly knew whether to be peeved or delighted. At the end of a week they were preparing a sign-board — 'The Unnatural Enemies' — and planning an exhibition. But the next morning the rat had disappeared. Lucy was satisfied and sluggish, with a huge bulge in his middle. The temperamental varmint had decided on a midnight lunch.

VIII

Alas, the summer is over! To-morrow we leave the shack and the knoll and go back to town. And we still have Lucifer. The critical consideration is, what shall we do with him? Of course the boys want to keep him. There is no question that Lucifer would add to their prestige — his cheerful rattle, like an alarum bell, would call the whole village to parley. But it is not to be thought of. I positively cannot spend my winter catching live rats

for Lucifer. The freshmen would n't like it. I doubt if the trustees would. Besides, the town air . . . it might not agree with him.

Or shall we drown him, so as not to mar his perfect surface, and mount his skin in a lifelike pose? A stuffed Lucifer has its appeal, but artistically it leaves me cold. Where the sparkling eye, the flickering tongue, the deadly energy of that swaying head? No. Rather than that, a farewell banquet, in which Lucifer, fried a golden brown and garnished with crispy slices of fried okra, shall be great nature's second course, chief nourisher in life's feast.

Or — and I put forward the suggestion with becoming modesty — shall we turn him loose again on his own beautiful knoll? I leave it to my readers. Votes from Milwaukee and Hollywood will be given their due consideration.

LEORA'S FATHER

BY KATHARINE HAMILL

I

THE charred stumps still smouldered, and the air was full of smoke and a black, burning smell. Fire killed the seedlings and kept the saplings back, but it made the grass come sooner; thin new spears would come up to make early pasture for the cattle, scrawny from winter feeding on the sour marshes. It was better to burn the pasture and fatten a few cattle each year than wait for seedlings to grow into saplings and saplings into trees big enough to cut for lumber.

The fire had stopped down close to the hammock, where the path was wet; had n't licked into the damp, heavy undergrowth beneath the cypress and swamp oak where palmettos grew big because they had plenty of water, because fire did n't set them back. It was a place where partridges hid when the covey broke; where a yearling could bog down in the spring of the year and never be got out; and a place where a man could lose himself in the black of night or even in the daylight if he had n't been born to the way of it. Clay Williams rode back through the black dust of the pasture to the county road, and the pony's unshod hoofs made a soft shuffling in the sand. The fire was out, stopped by the hammock on the south, by the road on the west. Might as well go on home.

On the way he stopped at Lou Jared's. He hitched his horse to the gatepost and walked round to the back

of the house. He rattled the screen door and Mrs. Jared opened it. Lou was n't home; he'd gone off with the wagon to get a load of lightwood; he'd be home directly. Would n't Mr. Williams rest? There was fresh coffee stewing on the stove. Clay took off his hat and went into the kitchen. The room was hot and close; flies buzzed against the windowpanes and hung over a plate of biscuits covered with cheesecloth. Clay had no use for Mrs. Jared, a sharp-nosed, dirty-tongued woman, but the coffee she brought him was strong and bitter and good. He tilted sugar into it and stirred it with a fork. Mrs. Jared brought him some sweet pink cookies.

'They're store cakes, and they're sure good,' she said.

'Yes'm. That's right.'

Mrs. Jared poured some coffee for herself and sat close by the stove.

'How's your folks, Mr. Williams?'

'Well, thank you, ma'am. We all been well this winter. Even Ma.'

'She's mighty pert to be so old.'

'Yes, ma'am, she is.'

Clay rolled a cigarette and looked out to see if Lou was coming. There was nobody in the yard. Just some hens scratching under the chinaberry tree.

Mrs. Jared dipped a piece of cooky into her coffee.

'Your girl's getting near growned.'

'Leora? Yes'm, she's big.'

'She'll be taking off with a man soon, I reckon.'

'Not Leora,' Clay smiled. 'She ain't that big yet.'

'A girl's folks is the last to know — I mind when I first walked out. A girl don't tell all she knows.'

'I reckon I'd know.'

'You're mighty certain, Mr. Williams. I heard different down to the store.'

'What's that you heard?' Clay's question was quick and hard.

'I heard how Leora been courting with some fella.'

'With who?'

'Didn't nobody rightly know. Seems like he must of been a stranger. Leastways nobody from around here.'

Clay drew in a deep breath of smoke and let it out slowly. He stood up and put on his hat.

'I reckon I'll be going along, Mrs. Jared. Obligated to you for the coffee.'

'Now don't get to fretting about Leora, Mr. Williams. They're all the same, girls. Pray God it won't no harm come, but from what I heard — they was mighty loving.'

II

Clay kicked the hound lying in his path, and he jerked so hard on the rope reins that the pony looked around at him. He rode as hard as the pony would go down the county road, past the schoolhouse at the forks, along to the bridge over Johns Bayou. Instinctively he pulled in on the reins and went slowly over the loose boards, but once on the other side he pounded his heels into the pony's sides and drove her fast through the woods to the store. He hated to spare the time to stop, but he had some grits and lard to get, and some tobacco.

The store was thick with smoke and talk, and a pitch-penny game was going on between the counters. Clay

was short with his talk and his order, but he had to wait while Joe went out to the warehouse for the lard. The counter supply had run out, but there was plenty out back. Clay signed his slip, put the lard and grits into a gunny sack, and tied it behind his saddle. It was getting dusk. The pony wanted to get on home to her supper.

But now Clay was n't in a hurry. He drew back on the reins and kept the pony down to an uneasy walk. When he came through the gate he was slow to fasten it, slow to take off the saddle and bridle and walk up to the house with the gunny sack.

Supper was about ready. There was meat stew on the stove and the plates were set on the table. Clay washed his face and hands in a basin by the kitchen door. He went in and sat down at the head of the table. His mother, old Mrs. Williams, was there, and his wife, Beedy, and Leora. Beedy dished up the stew and handed out biscuits hot from the oven. There was molasses to go on the biscuits, and strong coffee from the pot. None of the Williamses took long to eat, and Clay was the first to finish. He tilted back his chair and rolled a cigarette. The women cleared the dishes off the table and washed them in a pan of water warm from the stove. Clay watched the girl, Leora, as she moved back and forth across the room, putting away plates and cups and spoons and forks. She looked all right. She did n't look any ways different. He'd notice sure if she looked different.

Then he remembered something he'd heard his father say once: 'The first sign ain't in their shape, but in the way they stand.' It made him uneasy to remember that, and he watched Leora.

When the dishes were finished and the table wiped clean, the two older women sat in their rockers close to the stove. Leora had gone out with a bucket

of slops for the hogs. Clay went to the door and stood watching. He saw her come around the corner of the smoke-house carrying the empty pail. She stopped by the water tap and rinsed out the pail, tipped it against the tap, and left it to dry. She straightened up with an effort and stood still, her hands against her breasts, her head drawn back. She turned and saw her father looking at her. He did n't say anything; not then, nor later when she came into the kitchen. Pretty soon he went into the next room, took off his shoes and trousers, and went to bed. He was dog-tired.

Next morning Leora was gone. Nobody heard her go, not even old Mrs. Williams, who slept with her. But she was gone. She took what clothes she had and a little cash she'd saved from garden truck. She had a right to take it; it was hers. She did n't leave a note, and nobody knew where she'd gone. Clay Williams knew why she'd gone, but he did n't tell. He did n't speak about it at all, except that he told his wife to tell folks Leora had gone up to Vestry to visit. And he knew there was no use to look for her. She had a reason to go.

III

The old steers and the cows were easy. They milled around some and bumped up against each other, but it was n't much of a job to drive them into the pen and through the shoot down into the dipping vat. Some of them went in slowly and held their heads high, and came out the far end without clambering and slipping. Some of them kind of moaned when they hit the dip and splashed through in a hurry. But it was the yearlings and the bulls that bellowed, and went in out of sight, and hurt themselves climbing up the end. It was a shame to have to scare a good bull half to death and like as not have him break his leg on the concrete or

get hung up trying to jump the pen fence.

Let the government try to raise cattle once and see whether *it* would dip them for ticks. Ticks were bad, maybe, but a live bull with ticks was worth a dozen dead bulls without. No way to get around the dipping, though, unless you wanted to lose your cattle. The government men were right here watching. Came around regular twice a year, spring and fall. The only thing a man could do was to hide his cattle out, and then like as not they'd know about it. The old bull, the Brahman, did the hiding himself. All through the summer he was grazing in the woods as plain as could be, but when you went to get him in for dipping you might as well look for a still in the big swamp as to look for him. He'd been dipped once and he knew.

Clay had the Seymour boys, Barry and Vance, to help him. The government men were no help. They brought the stuff to put in the vat and then they sat and watched you sweat. A hell of a thing, to pay taxes so those fellows could watch you sweat. And kill your cattle, too.

Clay and the boys knocked off for lunch when half the cattle were run through, and Clay went down to the spring below to drink and to wash the cow smell off his hands. It was cool down there in the shade, and he sat up against a tree to eat his biscuits and pork. He got to thinking.

Six months since Leora had gone, and no word from her. She'd have had the baby by now. Had it and maybe buried it. The first baby died as often as not. Like his and Beedy's did, and like his second girl's, Marshie's, did. And sometimes the mother died. By God, if Leora was dead he'd find that man and kill him. Wring his neck or shoot him full of holes. Lynching was as good for some whites as it was for Negroes.

He remembered the time they lynched the three Negroes who burned the warehouse. A good time ago that was, but he could see them yet. His brother, Jody, was deputy then, and Jody had taken the three boys to his house and claimed he was going to turn them over to the sheriff in Pascagoula. He tried to do it all right, but Clay and the others would n't let him. Before daylight they rode out on the county road as far as the Bayou and waited for Jody. It was black as a nigger's neck and the men talked to each other in whispers, except for young Bill Nelson, who tried to joke and laugh in the stillness, and when a strange animal cry came from the woods he said out loud, 'Reckon it's a wampus cat!' and two or three of the boys laughed. Soon after, they heard the sound of Jody's team coming down the road. They let him get clean up to the bridge before they stopped him. He had a rifle on the seat by him, but he did n't use it because Clay had him covered. Clay kept his gun on him, and one fellow held the horses, and the others dragged the three handcuffed Negroes out of the back seat of the surrey. They knew all right what was coming to them, and they fell down on the road in the darkness so the men had to pick them up and carry them to the bridge. Nobody made any noise about it, except that Jody asked Clay to stop the hanging. He told him the law said the boys had a right to trial, but he did n't argue much because he knew it was n't any use.

One of the black boys yelled when they put the rope on him, but then he was still and the others were too scared to yell. It was over pretty soon — the three of them jerking down off the bridge girder, stretching the ropes down taut. Clay got into the surrey with Jody to drive home. When he looked back he could see the three bodies hanging there against the brightening sky.

Jody was still deputy. He was up there to-day in the Pascagoula swamp looking for moonshiners. Maybe he would n't find any, but he knew the way in there, and he knew the way out. Sometimes, they said, government men went in and did n't come out. A man with a still is kind of particular who finds him. But Jody knew enough not to mess with a man who just made a little 'shinny' to sell to his friends.

IV

Clay went back up to the pens and called Barry and Vance from their rest in the wagon shade. The government men were already standing against the fence, and one of them was marking things down in a book. He spoke to Clay.

'You-all did n't get many calves this year.'

'That's right,' said Clay. 'A heap of them died. Their mothers was sick of the dip, I guess.'

The man laughed.

'The dip never made a cow so sick she'd lose her calf. It's the fever ticks done it.'

The man's voice was easy and friendly, and Clay could talk to him.

'How come you-all don't run us men through a trough?' he asked. 'We got ticks, too.'

'Not fever ticks. It ain't plain wood ticks does it. It's fever ticks,' the government man explained. 'They get infected by something and they carry a fever to cattle and sheep, and it gets going all over the country — killing stock and making disease.'

'You been reading books, I reckon.'

'Yes, and I got word right direct from Washington. They'd ought to know.'

'Maybe they know about fever ticks and then maybe they don't. They don't know nothing about bulls and calves.'

'Well,' said the government man, 'it's the law and we got it to do.'

The Seymours and Clay got all the cattle run through in a couple of hours more — the yearlings and bulls, and the cows and steers and what calves they'd bothered to chase up out of the palmettos. They turned the frightened, bawling animals out of the pens and watched them go off into the woods. The job was done till next spring, and then there'd be a new bunch to drive up and run through. The government men wrote some more in the books and went away in their Ford. Clay left the Seymours by the gate and rode home by himself. It got dark early these fall evenings.

When he came into the yard, Jody was sitting on the back steps waiting. He got up and came to the shed while Clay took the saddle off the pony.

'There's something come up to-day, Clay. I got it to tell you.'

The two men leaned their shoulders against the shed door.

'I was up in the swamp to-day,' Jody said, 'and I found me a still. A big still, too. Two fellas run it, and they had them a camp and a great big old still way up on the west branch. There was two men. One of them give up first thing and come with us peaceable. The other fella tried to get away, and I shot him. Killed him dead.'

Clay scratched his back against the door and Jody went on with his story.

'He was nobody I ever see before. A big man with a kind of baby face. The other one said his name was Olly Powders. He come from Texas, he said, and he'd been around here a year or more. We buried him right there by the busted still.'

'Just as well to,' said Clay. 'Was there much shinny?'

'A heap of it. We searched the cabin and found nigh onto a hundred gallons.'

'Was it good stuff?'

'I did n't taste none of it,' said Jody. 'But I found something else in the cabin. Something I got to give you.'

Jody pulled an envelope out of his shirt pocket and handed it over to Clay. Then he got up and went over to the gate where his horse was hitched. He did n't look back before he rode off.

Clay read the name on the envelope: 'Olly Powders.' Then he turned it over and read: 'From Leora Williams, 511 River Street, Mobile.' He held the letter between his hands. So that was it. So that was the man. Dead now. And a good thing he was. Clay pulled the letter half out of the envelope and then pushed it back. The man was dead and Leora did n't know it, and he had her letter in his hand. It was dark to read. But he took the letter out and held a match to read the words by.

DEAR OLLY. He is a fine baby, the nurse says, and he takes after you. I made out fine when he come, the nurse says. I aim to take him to a place I heard of, Mrs. Lorrigan's in Pascagoula. Then I am going home. Yours truly, LEORA.

Clay folded the letter and put it back in the envelope.

He carried a bucket of water to the kitchen and set it down by the door before he went in where the women were. He went to the stove and shoved the letter down into the quick-burning fire. Then he crossed back over to the basin and tried to wash the sweat and the smell of disinfectant from his face and arms and hands. It was a sick, sharp smell — enough to rile a man's stomach.

V

Old Mrs. Williams had the fire going under the kettle before daylight, so she could get the clothes through boiling before Clay got around, because it was his day to kill the two mast-fatted hogs he had penned up, and he needed the iron kettle to scald off the hides. It

took all the family to slaughter and skin and clean and cut and salt. Clay did the killing and cleaning. Old Mrs. Williams tended the hide and rendered the lard. Beedy was a good hand to make headcheese and to preserve away knuckles and feet. Leora could start the salting of the hams and sides and backs (the spare ribs and a cut from the quarter would be eaten fresh now) to make ready for smoking. Live oak wood burning on the clay floor of the smokehouse was a good smell, and the meat would be sweet and good for a year to come.

Vance Seymour was over to help this morning. He just eased in soon after breakfast, not to be paid or even because he'd been asked to come. Clay reasoned that there was some cause for his coming. The Seymours did n't go out of their way to work. But Vance was pitching into it this morning, and talking and laughing while he worked. Clay could n't figure it out.

Leora had a big table made out of pine boards on trestles close by the shed, and she was trimming and salting the chunks the men carried her. She was fast and good with her hands, and she did n't waste time talking. She had n't talked much since she came home. Seemed like she was quieter in all ways. Once when she first came back, a month ago, Clay had seen her cry. She was working with him in the garden, pulling potatoes. He could see the tears on her cheeks. But she never said anything, and nobody asked her questions. When she first walked in the house that day she came home, Beedy, because she was so tickled to see her, asked how she'd made out. And Leora said, fine, she'd been in Mobile. She'd worked for a spell in a fish-pack factory, she said, but then she quit and got her a job sewing. She'd made out all right. Old Mrs. Williams reckoned she was glad to be home. Yes, ma'am, she was, said Leora. And then there was no

more questioning, and no more talk of where Leora'd been.

To-day she joked some with Vance, and it came to Clay, as it might have come earlier, that Vance had a mighty good reason to help with the hog killing. He was courting Leora, and a man wants his girl to see him willing and strong and generous. Maybe Vance was all those things, but he was n't much 'count. None of the Seymours were. There was n't one had ever come to much. He'd make a good husband for Leora, though. He was handy with a horse and in the woods, and Leora would keep him working. Clay would be willing that they should have a piece of land up back by the branch, and he would like to see Leora settled. He aimed to see her marry and have kids of her own. She had one, of course, and it was her own, more maybe than any other would be. Maybe she wanted that baby with her; maybe that's what kept her so still — thinking of the baby over in Pascagoula.

Vance slung a whole side of the second hog over his shoulder and carried it to the table. He squatted on his heels and talked to Leora while she traced out the pattern of her cuts with the knife point. Vance was telling her about a cow he had, an old mooly he'd bought cheap from Bill Nelson. She gave good milk all summer, he said, but she was mean as a cow could be.

'Sunday evening I got so danged mad at her I hauled off and hit her hard as I could in the bag. She ain't give down a drop since.'

'You ought n't to done that, Vance.'

'No, I reckon not, but she sure had me sore. I hate a mean cow.'

'She'll most likely come to give milk again before long. That is, if she ain't dry.'

'She's no call to be dry. She was due to be fresh last month.'

Clay could hear them talking easy like that, and he felt better about Leora.

She was a good girl even if she had gone off like she had. It was good to hear her laugh and to watch the quick, clean way she had of cutting the meat, finding the joints with the knife edge and chopping through the gristle with sure licks of the hatchet. He listened to her and Vance, and he heard Vance start to tell her about Jody's raid on the big still. Clay made as if to stop him, but then he figured she had to hear it somehow. As well for Vance to tell her as another.

'He slipped up on them,' Vance was saying, 'whilst they was setting the mash. Two of them, there was, working the biggest still you ever see, right in the clearing alongside the cabin. Jody says he and Tom held the guns on them and watched a good time before they hollered at them. Then the little fella stuck up his hands and walked right up to the guns. But the other one dodged down and made to run into the brush.'

'And Uncle Jody shot him?'

'Sure did. Bang, like that. Let him have it smack in the back. Killed him like I seen him kill a crazy steer once. He never so much as rolled over, Jody says.'

'They was strangers?'

'Yes. The little one he come from up near Tupelo somewheres. He said the other fella, the dead one, was from Texas — fella by name of Powders. He had no folks to know of, Jody says, so he buried him there, right there by the still where he shot him. Boy, they sure was making them some shinny! A hundred gallons or more, Jody says. He went back up and carried it to the government office. I wish I had me some right now.'

Clay saw Leora's hands move slowly along the table, her face set white. She was smiling at Vance and nodding, but she had n't heard a word since he said

the name 'Powders.' She just smiled some more and picked up the knife to finish off the cut she was working on. Vance got up off his heels and got himself a drink of water before he came back to where Clay was. He was still thinking about those hundred gallons of 'shinny.' And Leora went on trimming and salting as if she'd heard nothing at all. Only she did n't laugh again that day and she went off to bed soon after supper — claimed she was tired from the long time standing over the butcher table.

VI

Clay had time to do some figuring that night, and by morning he knew what he had to do. He told Beedy and she agreed to it. He was alone in the yard while he put the harness on the pony next morning. But after he had backed her into the wagon shafts and buckled the tugs down he looked and saw Leora standing by him. She had a kind of scared look on her face and acted as if she wanted to say something. Clay went to the house and came back out with a folded quilt on his arm. He got in the wagon and put the quilt by him on the seat. Leora watched him.

'Where you going, Papa?'

'I'm going to Pascagoula.' He did n't look at the girl while he spoke.

'What for, Papa?'

'I'm going over there to get that baby, and bring it home here.' Leora did n't speak, so he went on talking. 'Reckon we can fix up some sort of place for it to sleep?'

Leora smiled at her father. 'I reckon so,' she said. 'It's a small little thing.'

Clay jerked on the reins and the pony started for the gate. Leora stood there smiling, looking after him.

THE BATTLE OF BOSTON COMMON

From a Surgeon's Journal. II

BY HARVEY CUSHING

[In the early years of the World War the experience at the American Ambulance of the successive university units aroused the interest of Mr. Robert Bacon, Sir William Osler, and others. They suggested the recruiting of similar groups of medical men accustomed to work together to take over the direction of certain of the newly established base hospitals in the B.E.F., their personnel otherwise being supplied by the Royal Army Medical Corps. Out of this, and as part of the preparedness movement, during 1915 and 1916 the effort was made by Surgeon-General Gorgas, acting through the Red Cross, to organize the complete personnel and to equip for service six American base hospitals representing that many medical schools with university connections. The quota of nurses and officers was easily made up, but it was found nearly impossible to enlist the minor personnel of cooks, orderlies, artisans, technicians, and so forth. The Cleveland (Lakeside Hospital) Unit, being the first to approximate requirements, was given in September 1916 a two-day trial mobilization in Philadelphia under Red Cross auspices. — THE EDITORS]

Boston, Monday, March 19, 1917

Saw Mayor Curley this morning at 12.30 by appointment. Put before him the possibility of temporarily mobilizing the three local Red Cross Base

Hospitals on the Common, partly to give them needed experience, partly to help on the Red Cross, interest in which might thereby be stimulated. He took the fly eagerly, but favored the Fenway — would look into it immediately and let me know.

A meeting of the Unit at 4.30 in my rooms — nearly all there. Officers' roster about completed — also the nurses — also fifty students enrolled. Took a typhoid inoculation No. 1, as an example to the others, much as I dislike being punctured for any purpose.

Tuesday, March 20

The Mayor is out with it in the papers this morning — unfortunately giving the impression that the encampment may be permanent. Pituitary operation. Executive Committee meeting. Dictating laboratory notes in afternoon. At 5 P.M. to a Red Cross organization meeting in Brookline.

Fever, backache, and herpes from my inoculation; so a milk-toast supper and then to the Medical School to persuade the artisans who have volunteered for the Unit formally to enroll on the Red Cross blanks. Most of them refused — only 36 signed up (to qualify we need 150). Others wanted to know about wages — and what if we should be called out? This is patriotism.

Thursday, March 22

Summoned at twelve to attend a meeting of the Park Commission to discuss the best place for the hospital mobilization. Mayor Curley has acted quickly. This means letters to Washington for advice and information. Long conferences during the afternoon with various committee representatives — Algernon Coolidge in to say that, though sanction had been given for their enrollment, the University has now formally advised all students not to sign any papers!

Friday, March 23

Usual morning's struggle with a pile of mail, followed by a tumor operation. Conference with Burlingham over the adjutant matter. He is going to St. Louis and so is obliged to withdraw. Captain Reynolds, our volunteer quartermaster, here at 4.30. A long powwow followed with the second-year students who have enrolled, but now have cold feet. 'Can they not serve their country best by continuing with their courses?' I am to strike all the names off and take those who *re-apply* — only want men who are *sure* they know what they want to do. I am taking the same gamble they are. They took it very well.

The Germans seem to be making a stand on the so-called New Hindenburg Line, destroying everything in their wake.

Monday, March 26

Afternoon in the wards till five, when a meeting at Colonel Peabody's office with the directors of the other two local Base Hospital Units, who do not look favorably upon a practice mobilization. Even a week's tour of duty would demoralize their hospitals and be an unnecessary drain on Red Cross resources.

We decide to buy the perishable goods for our three outfits — even

though the specifications advise waiting till the last minute. The three 'mother' hospitals can draw on them for their everyday needs and thus keep the supply for the units freshly replaced. Seems a simple solution of the problem, but the administrative mind does not take kindly to it.

Telegram from Washington asking if we can send muster-in rolls on or before March 30. Kean strongly favorable to proposed mobilization. To gathering in evening at Opera House under auspices of Greater Boston Ambulance Committee, with music, speeches, and French war films. An appeal for more cars for use in France.

Leonard Wood appears to have been demoted to the Department of the Southeast, with headquarters at Charleston. New England is likely to be pretty mad. The *St. Louis* is reported as having reached England — our first armed merchantman. Her sailing was kept secret. 'Armed neutrality.'

Saturday, March 31

After two operations, to lunch with the Saturday Club. Much war talk and passing of resolutions, on the nature of which it took us long to agree — also, it may be added, on the value of them. Mr. Lowell from his end of the table: 'If you wish to drive him [the President] to Dublin, he will try to go to Cork,' and so on. However, there was a final compromise and the document was worded at the end according to Mr. Storey's version — 'a state of war exists and should be prosecuted with vigor. . . .' Cameron Forbes, James Rhodes, President Eliot, Edward Forbes, Roscoe Thayer (who was ill satisfied with our compromise version), Major Higginson (who read letters just received both from Mr. Wilson and from his silent partner, Colonel House), Farlow, Howe, Professor Pickering, Dr. Walcott, George

F. Moore (who left after giving his vote to Mr. Storey), and a few others perhaps. Doubtless the same thing is being done over the entire country. What Mr. Wilson will do, he alone knows.

Back to the hospital for a busy afternoon with Captain Reynolds over our enrollment blanks, which we finally got off to Washington lacking the minor personnel. The students have been advised to withdraw, and I am ashamed to send the lists with so many scratched names. It is 'difficult to secure the cohesion of important mediocrities' at a time like this, and we are going to see a lot of pulling crossways before we are through.

So far as I can see, one must fix his eye on what Washington desires and keep to that whether one likes it or not. Theoretically people in this community are bubbling with patriotism; practically many of them spend their time scolding the government because they think it is n't doing what they want — while it may be. After all, it's their government. They laid the egg and now are doing their best to addle it.

Late home. Asked Gus on the way if there was any news. He said: 'No, but it looks as though they might monopolize [*sic*] the militia any minute.' In evening another patriotic mass meeting at Opera House under auspices of the National Security League and sixteen other organizations — including Mayflower Descendants, Sons of the Revolution, Colonial Dames, and so on. Of all the speakers Paul Revere Frothingham alone was inspiring. He should be used oftener.

Monday, April 2

Meeting of the local Committee on Public Safety called at eleven at the City Hall. Stirring speech by the Mayor and then by the various chairmen of the eleven subcommittees. Resolutions to the President and to

Congress. Rumor that Senator Lodge and a pacifist have had an altercation — that Mr. Lodge 'has put the fist in pacifist.' We parade to the Common, where pundits in tall hats on a platform wave flags and utter voiceless addresses to some 25,000 people. Strong and I escape with difficulty in the wake of a burly policeman and go to the Harvard Club for a meeting of the Committee on Hygiene. Base Hospital trial mobilization brought up. Colonel Williams alone supports me. Telegram received from Washington offering to detail officer and detachment to assist the project.

Tuesday, April 3

The President asked Congress yesterday to declare that *a state of war exists with Germany* — the message a great document. He has said effectively what we have all long felt. It is to be hoped that the German people may be given a chance to read it.

Letter from Red Cross Headquarters promising tents, but advising portable structures for operating room, mess, and administrative offices. States that there will be plenty of time: 'the creation of an army will have to go on in a leisurely way.' They are now making plans for 33 base hospitals like our own. Many of the directors already writing here to ask advice. Learn from Baltimore that the Hopkins Unit is enrolling students.

Wednesday, April 4

Clinic day. Appeared before the Administrative Board at the School to protest their action concerning the students who had reënrolled with the Unit. Find that someone has privately misquoted the action of the Board, causing about half of them to withdraw their names.

The Senate has voted for war, 82 to 6. The group of 'willful men' has held out.

Friday, April 6

Left the meeting of the Committee on Hygiene, Medicine, and Sanitation early to attend faculty meeting. Succeeded in getting the Administrative Board vote, as recorded, rescinded.

The House of Representatives has overwhelmingly voted for war — 373 to 50. Wilson has signed the declaration.

To 'The Club' at seven without time for dressing. Full gathering — even George Moore. Sat between him and Mr. Crafts. Free talk about war — the coming one, and the one of a half century ago, which is only too well remembered by all of them. A long talk with Mr. Higginson and Dr. Walcott about the Base Hospital mobilization. 'The Major,' as usual, is fired with a spirit of coöperation, and Dr. Walcott will see what he can do at the Massachusetts General.

Easter Sunday, April 8

Much telephoning in regard to a meeting with Eliot Wadsworth at the Mayor's office to-morrow at ten. The Mayor calls off a funeral for the sake of it — rather, his attendance at the funeral. Colonel Peabody, C. F. Weed, the three Base Hospital directors, Colonel Williams, Commissioner Dillon, and John Saltonstall. Chief arguments for the plan were outlined briefly as follows: —

'The Red Cross has already raised *circa* \$100,000 for the equipment of three local base hospitals which are to revert to the army when called upon. As yet they are paper organizations wholly unfamiliar with army formalities. They need the experience of a mobilization no less than raw troops need it. Only in this way can imperfections and omissions in their equipment be disclosed. Their emergency requirements can meanwhile be supplied by the local "mother" hospitals. A further object is to attract public interest and

thus to facilitate the enrollment of the 150 minor personnel each hospital must have to meet army regulations.

'Of the several sites suggested, the parade ground of the Common is strongly favored. It is central and convenient to the source of most of the accidents cared for by the city. Moreover, it is associated in people's minds with patriotic demonstrations of all kinds. It is turfed, has a good slope for drainage, and could be easily policed. Gas, water, and sewer connections could be installed with but little expense.

'Apart from a few portable houses for operating room, administrative office, and kitchen, the hospital would be in tents. These could be floored by using the winter board walks taken from the public parks. The encampment would cover only six to eight acres of the Common. It could be made attractive and interesting with its flags, military guard, bugle calls, drills, Sunday service — and perhaps once a week a concert by a military band.

'It is proposed that the city accident cases be reported by the police to the Red Cross, whose ambulances would route patients to the Common instead of the Relief Station. The question of legality of treating city patients under these circumstances could probably be easily met. They would doubtless receive better care than under usual conditions in view of the standing of the medical officers and nurses to be in charge. As soon as the patients are able to be moved, they, with their records, would be evacuated by Red Cross ambulances to the City Hospital or elsewhere.

'An estimate of expense for a two weeks' service for the first of the three hospitals would be *circa* \$15,000. Many requirements such as uniforms, laundry, fuel, electric light, and so forth, might in all probability be donated. A continued service for the

other hospitals using the same equipment would add little to the cost.'

Monday, April 9

To the City Hall at ten after getting through morning's mail and many interviews. The programme was again outlined and Major Higginson warmly supported me. After he and Eliot Wadsworth had left, the Mayor came in, whereupon strong opposition to the proposal was made by the directors of the other two hospitals. I finally offered to go it alone. It will be a big job. Many will be glad to see it fail.

Tuesday, April 10

Ward visit at Children's Hospital. Laminectomy for spinal tumor. Busy with preparations to go to Washington by Federal Express for a meeting of the recently organized Standardization Committee for Medical Supplies.

Wednesday and Thursday, April 11-12

Two very busy days in Washington. Much shocked to find regular army officers in 'civies.' 'Not the thing for the officers to wear uniforms.' How can they expect people to enlist? Called on Colonel Kean and General Gorgas. Visit to latter interrupted by entry of Senator B——, from a side door, with a young lady. The General bows and scrapes. The Senator's young woman would like a secretarial position. I escape. However, it appears that both these men — that is, Kean and Gorgas — will help in so far as they can. But are there any tents to be had?

Meeting of Committee. The standard chests are antiquated, with instruments dating from the Civil War. Much work to do in passing on army and navy and base-hospital kits. Instrument manufacturers in trouble. Men have long since left to enter munition shops, where better paid. By Wednesday night most of the Commit-

tee had faded away, leaving a few of us to make the final decisions — not so easy.

Friday, April 13

Busy, early till late, on the proposed mobilization. Mr. George Cutler, Jacob Peabody of the Red Cross, Colonel Chamberlain of the Army, and young Kettell, the architect. Plans for portable houses, and conspiracies to raise money. Mr. Rice in after luncheon, and we find he has made similar plans for a hospital at Quincy. At it until late in afternoon.

Evening spent in writing letters for Richard Strong, who sails to-morrow on the *Chicago*, with some physicists and chemists, for abroad. Joe Ames to be one of them.

Saturday, April 14

The Mayor to see me at his request at 9.15 — does not come. Fear there is some legal entanglement about taking patients. Brain-tumor operation — took longer than expected — missed lunch with Messrs. Cutler, Peabody, and Chamberlain, but joined them later to see portable houses at Dover. Mr. Hodgson guarantees to have four 22-foot-wide buildings by May 15. All his other work to be put off. Depressing dinner with a friend who says, 'What's the use of all this hysteria about preparedness? We'll never be invaded.'

Monday, April 16

The usual morning rush before operating. Ward visit and then Captain Reynolds about his commission. To the City Hall to see Corporation Counsel Sullivan. The legal mind! Fears we may have someone get out an injunction against us for putting up structures on the Common! Necessary to go to the legislature. Our conference interrupted by an urgent telephone from his wife that their house was burn-

ing down. So I took him home. It was n't.

Evening spent in arranging for our next step — Kettell and Colonel Chamberlain to plan out the encampment so we can have something to show on paper at least. I feel to-night that we have bitten off more than we can chew. People say, 'There is n't going to be any war for us.'

Tuesday, April 17

General Wood and a commission are in town — appointed to meet Balfour, Joffre, and others, 'when and where they may land.' The idea occurred to me that he might settle all doubts as to the base hospital, and, though these people are incommunicado, I found where he was at lunch and pursued him there. He will be glad to do anything we ask — would have liked to get one of the hospital units mobilized at Plattsburg. Long talk with him about his demotion.

To the City Hall, where Mayor Curley orders off 150 invitations to people to come to-morrow at eleven. I finally ran down poor Major Higginson at 1 Ashburton Place, looking very tired and showing his eighty-three years for the first time I have ever seen him. He gives me suggestions in the way of names, and I go back to help the Mayor's secretaries get out their list — women included.

Tea at Guy Murchie's with L. W., 'Jimmie' Williams, and the two young officers who are training the students at Harvard. The General says he has ordered officers to appear in uniform. High time. Discussion about the so-called 'commission' to meet the foreign guests and the absurdity of its having no high government official. Wood the only real figure. Lucky they have him. Says he knows Balfour — met him at dinner first in 1902, when he came back from the Philippines and after his Cuban governorship. Balfour

asked him what the United States would do for him on his return — mentioning what England had done for Kitchener and Cromer. Wood replied that he would have difficulty even to retain his commission in the army.

Evening spent in telephoning people to come to-morrow; most of my friends and supporters, alas, are out of town.

Wednesday, April 18

Rainy day and unfavorable for our meeting. Called at the Copley Plaza for General Wood. They denied his existence. The carriage flunkey finally told me that he had gone off 'for a ride.' I bribed him to put the General in a taxi and send him to the Mayor's office the moment he showed up. A small group finally gathered from out of the rain — practically those alone to whom I had written or telephoned. Good old Mr. Cochrane, Major Higginson and his brother, Allston Burr, Mrs. Sears, Robert Winsor, Mrs. Blake, John Saltonstall, Cameron Forbes, and a few others — perhaps thirty in all.

We were ushered into the Mayor's office and, General Wood not being there, I had to make the appeal myself. General Wood and Jacob Peabody finally came in — had been detained at Cambridge. The General in his straight-from-the-shoulder manner said some very appropriate things. Mr. George Cutler was made treasurer and said he hoped the necessary sum could be raised on the spot. I estimated it at \$20,000 for the four buildings and completed equipment and said that I would give \$1000. The Mayor followed suit. The amount was promptly underwritten.

Unhappily we were then captured by the Mayor, who insisted on a photograph — Mr. Higginson, Admiral Bowles, General Wood, the Mayor, and I! The man had difficulty with his apparatus and I hope it was a failure. Apart from this episode it

was a satisfactory and rather exciting meeting.

In the evening to hear Gerard speak at the National Defense dinner at the South Armory. Much smoke (tobacco) and little fire. The presiding officer worked himself into a fervor in answering the question (several times repeated), 'What can we do?' Answer, with outstretched arms and eyes on the rafters: 'We can only watch — and stand — and pray — while our great leader . . .' and so forth. L. W. spoke briefly and much to the point as usual.

Thursday, April 19 (Patriots' Day)

Many business *varia* at hospital until ten. Numerous visitors. Account of yesterday's meeting in morning papers brings many telephone calls — for example, from Miss Curtis expostulating on the proposed use of the Common; and finally a Mrs. Brown of the Boston Common Committee (!!) was announced, a little old lady who said she had given birth — in other words — to the Common Committee when there was a question many years ago of putting a pump on it. The Common would be preserved with her blood if need be. To have people 'operated' (*sic*) in public on the sacred Common was a sacrilege, and so forth.

I have read about such people, but have never seen anyone quite like her, and equally misinformed, except at the antivivisection hearings. She said it was an advertising dodge of Mayor Curley's — or mine! But we parted the best of friends — 'I must see the Common Committee and tell them just what I had told her — in the same way — so nice of me — busy man — give her so much time — come and have tea with her.' An experience out of a novel.

Later, messages galore from other people who don't like our project. Cutler and Kettell here working on plans. Washington is growing dubious

about tents. May need all they have themselves.

'The Auxiliary Medical Committee for National Defense of Boston, Massachusetts' — all that — met this P.M. to appoint a new chairman to take Strong's place. Meanwhile it gives origin to eight subcommittees! Committees breed like rabbits. We're digging up our front lawn to plant potatoes.

Saturday, April 21

Busy day — tumor operation — felt ill afterward — hope I can pull through the next few weeks. Captain Reynolds, Kettell, Cutler, Roger Lee, and others in at 3 P.M. Allston Burr with a letter to Mr. O'Brien anent the unfavorable *Herald* editorials. A telephone from the Mayor's office saying that he was going to put an appeal for more funds in the papers to-morrow. Lucky thing his secretary read it, for it contained statements that would, I fear, have ended the project. Begged the secretary to cut them out and hope he understood. Late afternoon spent over plans and specifications at the portable-house place in Dover.

Sunday, April 22

More telephoning from people — evidently 'sicked on' — who do not want to see the parade ground desecrated and who fear that Mayor Curley has ulterior motives. Attempt to answer letters of protest requiring a personal reply: for example, 'The building of a hospital on Boston Common would be a menace to the health of the hundreds of children of the vicinity who throng the ball fields and parade ground all summer and on every holiday. Last Thursday, April 19, there were ten games of ball going on and crowds watching. . . .' Streeter comes in and donates \$500 plus a Ford car (on demand) for the hospital's use!

Monday, April 23

Meeting of the Unit in my rooms this afternoon. A discouraging letter from Washington that no tents can be had for this or any purpose. All looms in country called upon to manufacture duck for Quartermaster's Department. They suggest trying the state militia. So to Colonel Williams, who says no tents available here. So much for promises and our fine bird's-eye view of the encampment — just completed by Mr. Kettell.

Wednesday, April 25

Meeting with the uncommon Common Committee at 4.30 in Mr. James A. Lowell's office. Finally persuaded them — I think — that this is to be a purely military procedure in strict accordance with the Common's best traditions. Very funny — if it had not been so serious. Individually they stepped outside and wrung my hand — 'Good thing' — 'Push it along' — 'I'm with you, though did not like to say so in there.' Just why I can't imagine, but this is Boston. It took nearly two hours. Mrs. Brown wanted to know why we could not have our encampment stretched along the mall on Commonwealth Avenue.

Stopped at Mrs. Thayer's to ask how she'd like it — also for a late cup of tea. Base Hospital No. 5 plans evidently the talk of the town — particularly of 'sewing circles.' Comment mostly unfavorable through misunderstanding of our objectives.

Thursday, April 26

Feeling the need of stemming opposition, to the Thursday Evening Club at James J. Minot's, and heard Osterhout 'On the Biologist's Interpretation of War.' Also Mr. Eliot, informally, on the good things that are showing up through the war — they seemed somewhat microscopic; and finally Chadwick and a group of young musicians

gave some delightful seventeenth-century music accompanied by a harpsichord!

Then I began to get it. 'You the fellow who is talking about putting a hospital on Boston Common?' I finally began to make some progress with William Thayer, Wallace Goodrich, and one or two others. Hope it will do some good. We plan for a meeting of the N. E. Surgical Dressings Committee in the Brigham amphitheatre next Wednesday in the hope of getting some tongues to wag in our favor. An encouraging telegram comes from Colonel Kean, saying don't be downhearted.

Friday, April 27

To J. C. Warren's to see, from his Beacon Street balcony, the Harvard Regiment march by, escorting the French officers who have come to train them. A fine sight, but the bystanders showed little enthusiasm. People interested, of course, but no cheering or waving; and I saw no one salute the flags. Fifty-odd years ago, from those same windows overlooking the Common, anxious eyes saw troops pass by to something that was real.

Back to the hospital, where Kettell is a little dubious over his bird's-eye drawing of the encampment about to be released for to-morrow's papers — it will do, I'm sure. Remainder of the day spent trying to turn the current of public opinion. To the Tavern for tea, where they all said 'a fine idea' when they learned what had been done and of our real purposes. 'Had the French officers seen a military hospital on the Common this morning, they'd have thought we meant business.'

Then to the Doctors' Club dinner at Taylor's, where it came up again, and I think I temporarily convinced most of them — best of all, Fred Shattuck, the last I had expected to come around. Mr. Lowell had telephoned in the afternoon to say that the matter had been

brought up before the Corporation — that they were unanimous in saying they could not give the movement their support — that it was not their project!

Saturday, April 28

My dander has been up like Dr. John Brown's little mongrel when a bigger dog exhumed his buried bone, and I've been hitting out at these stand-pat Bostonians and their Common. A Mid-Westerner's traditions of the old parade ground and its noble history need be no less patriotic than theirs. Boston for two years past has been 75 per cent talk and kick, and 25 per cent action. Massachusetts is the thirty-third state to complete her quota of militia, instead of the first, as she once would have been. Curiously enough, they don't seem disturbed about it.

A busy morning; started a pituitary transfrontal operation an hour late. Good case — congenital suprasellar cyst — best operation of the kind I have ever done.

Councilman joins me, and so to the Saturday Club luncheon — for more work as a publicity agent. Let off some steam on him and easily aroused his indignation at the opposition. An unusually large gathering — Haskins, Roscoe Thayer, Mark Howe, Ellery Sedgwick, Pickering, Dr. Walcott, President Lowell, Dr. Emerson, Sturgis Bigelow, Richards, and several more, with one or two guests — one of them Major Azan in his *horizon-bleu* uniform, a fine type of young French officer such as I remember two years ago.

Before we took our places Mr. Eliot quite unexpectedly said, 'I should like to have you sit by me to-day.' This I did — where some guest usually sits. We began with the oysters, when he turned, saying: 'A friend telephoned to me this morning to use my influence

to have this hospital of yours kept off the Common.'

With that I was off with the familiar story. 'Have as much respect for the Common as anyone — the Harvard Regiment parades down the principal streets behind a band — if they mean business a good many of them are going to get hurt, and someone had better begin to learn how to take care of them in an army hospital under something like field conditions — hospitals as necessary in war as troops — we don't propose to be put somewhere on a back street — deserve the most prominent place for the mobilization that the city can find — seeing some people in uniform actually at work will increase Red Cross subscriptions and encourage enlistments. More important than all, will give us invaluable training with army procedures and forms. Anyhow, it's only for a matter of six weeks, even should the other two hospitals join in.' Well, he got interested and finally indignant.

(Later. Written on May 3)

Too bad I could not have finished the above while I was warmed up to it. It was an extraordinary occasion. I saw no food after the oysters — only something red. Told them I thought little of their regard for an historically dead instead of a living Boston Common. Got Major Azan with his splinted arm to explain what military hospitals were for, which he did movingly; slammed out at someone who wanted to bet that there would be a stone annex of the City Hospital on the Common before the summer was over; chided Henry Higginson and Dr. Walcott for not having stood by me at the Corporation meeting.

Jim Curtis, who has been in Washington long enough to understand that we are supposedly at war, quietly said, 'Funny, when I got to New York this morning the first thing I heard was:

"Boston has the jump on us at last; they are going to get one of their base hospitals out on Boston Common, and we are only talking about ours." This provided a glimmer of hope. But someone hustled up saying he would personally defend the parade ground (on which his bedroom windows look down) against this sacrilege; and I, that he typified those who, to protect a plot of grass, would ignore the country's unpreparedness — the Common could be reseeded.

Well, in the midst of it all, — getting more and more 'het up,' — I was called downstairs to the telephone: telegram from War Department, Washington — 'Wire this office earliest possible date that your unit can be mobilized for duty abroad. All expenses borne by Government. (Signed) Gorgas.'

The grass will continue to grow on Boston's famous parade ground.

Sunday, April 29

Yesterday afternoon and evening a whirlwind trying to get in touch with members of the Unit scattered for the week-end. At it again all to-day trying to complete our enrollment. Many changes necessary. Frequent exchange of telegrams with Washington. Wonder what they will say about these eleventh-hour withdrawals. May lose us our chance. Decide to go on to-night with Cutler for inside information and authority to advertise for personnel.

Visit to General Edwards for a few minutes. Will do anything — everything — for us. 'First thing Leonard Wood told him was to get behind our base-hospital mobilization.' He and Mrs. Edwards both very cordial — very cosmopolitan — very unprovincial. Just what is it? They will shock Boston. Fine to see him in his uniform, though he is not to be officially in charge till Tuesday A.M.

Mr. Storrow on the train — much interested. Offers us, for the Commit-

tee of Public Safety, \$5000 for incidental expenses.

Monday eve., April 30 (Federal Express)

A good thing to be 'Johnny on the spot.' After a snatch at breakfast we got to the Red Cross Building about 8.30, before anyone was there. As we were planning our campaign and reviewing the countless questions we wished to ask, Eliot Wadsworth came in and, knowing our mission, planted us in Colonel Kean's office. There much telephoning from all parts of the country, though the Washington exchange is poor and the lines overbusy — people wanting to know if they can be guaranteed against submarines, and so forth.

Meanwhile we gather information regarding the other five units that have been approached, Crile evidently the only one approximately ready, thanks to his mobilization last autumn. We finally learn who the other four are to be. Much business also on our own account. 'How much luggage? Nurses' aids? Secretaries? Commissions? Passports? Can we draw on the other Boston units for personnel? What shall we do with our portable houses? What with our Red Cross equipment?' And I don't know what else.

Finally we were sent for from the War Office — Colonel Goodwin, the R.A.M.C. representative on the Balfour Commission there, also Kean and Gorgas. Everyone very pleasant. Joke me on being a Major. Congratulate us on our selection. Due solely to the Common mobilization activity — looked as though we meant business. Two immediately urgent needs of the British Army are more medical officers and more engineers.

Long talk with Colonel Goodwin — very fine in his staff officer's uniform, with its red facings, such as I saw in St. Omer two years ago. Whole thing his idea. Thinks we shall go to England

first and later to France to join our first Expeditionary Force when it goes over. Knows Percy Sargent, Herringham, and the rest. Called from France to go on the Commission. Left his horse standing by the road, got a motor, fifty miles to Boulogne, barely caught the boat. Not a moment to outfit.

General Gorgas evidently tired, but cordial as always. Piles of unopened mail on his desk and still answering his own telephone, which is not even in reach of his chair.

Back to the Red Cross Building for further conferences. Major Patterson to go with us as our commanding officer. Very lucky, and he is delighted. Reynolds, alas, can't qualify — need a trained army quartermaster and one will be sent with us — terrific job. Lunch with Kean at the Army and Navy Club. Joffre and Balfour have stirred things up. People at last getting into uniform. A very different Washington from two weeks ago. An occasional French officer on the streets. Goodwin said we shall have much in store for us when we get over under the American flag.

A lively afternoon at the Red Cross Headquarters — finally given permission to send messages through to Boston with carefully worded advertisement for morning papers: 'Wanted: 100 volunteers — cooks, orderlies, clerks, carpenters, electricians — to enlist in Medical Corps for early service overseas. Report Harvard Medical School between 4 and 9 P.M.'

Sunday, May 6, 6.45 P.M.

Quiet for the first moment since we got back Tuesday morning. Such a week! We feared the attempt to get ready for the Common by May 15 might break us down, with three weeks' time and a chance to borrow needed things; but to do it all in seven days! Well, we turned loose. Cutler was indefatigable. Captain Reynolds worked

like a dog. The tailors put off all other work to make our uniforms; the Committee of Public Safety sent cars; the Special Aid Society, food. Secretaries appeared out of a clear sky. Mrs. Wendell presented us with our flags. Additional telephones installed and going all day long. Towne and some others giving physical examinations and inoculations for the volunteers, who began to appear in large numbers in answer to the advertisement in the newspapers. Lieutenant Villaret — a young artillery officer from Fort Banks — detached to us by General Edwards. Helped us a lot, and with the aid of Sergeant Hepburn even began to whip the motley crew into shape in the lane outside my rooms. Contradictory orders from Washington — one day one thing, the next day another. Poor Patterson in a panic there about our commissions. Last-moment shifts in personnel and even officers! New physical-examination papers requested for deposit in Adjutant General's Office. Harry Forbes's glass eye was a stickler, but we assured P. he could see through it. Gracious, how we need universal training!

Every morning at 8.30 things would begin with a rush, ease up a little by late afternoon, and by evening some fearful problem would present itself to disentangle — usually there till midnight with Reynolds; very little food, very little sleep, and incessant cigarettes. A bad combination, but somehow it went along.

Went out twice for an hour — Tuesday to the Tavern annual dinner. Could n't bear it, though 'the Major' gave them a straight talk about alcohol. W. L. at the close, raising his glass to me: 'God Almighty intervened to keep you from putting a hospital on Boston Common.' Ah, well! This at least was an admission that we might have gotten on.

Friday night at 'The Club' dinner

was much better. Tom Perry, Morse, Storey, James Rhodes, Bigelow, Duncan, 'the Major,' and George Moore, and we talked freely. But not this time, as so often, about the bloody corner at Gettysburg and just what happened there. It was largely about prohibition — Sturgis Bigelow protesting that it would be very injurious for men, long accustomed to alcohol with their meals, to give it up. He was effectively slain. Sturgis's whiskers have had a sort of surprised look ever since I lashed out at him at the Saturday Club — only a week ago, though it seems a year. They were all very nice to me, however, and when I got up to go before the usual time were a little teary in their good-byes. I knew well enough what they were thinking of.

Endicott Peabody dropped in — Friday afternoon, I think it was — to see me about Malcolm. My mind was racing, and before he had had a chance to say anything I fired him with the idea that we must have a service Sunday so the Chaplain could talk to the enlisted men on their responsibilities abroad. He rushed off to see Bishop Lawrence, and the Bishop cordially took to it.

Late Saturday evening our sailing orders came — 'from an unknown port to an unknown destination'; and this morning our C. O., Major Patterson, with Harmon, the adjutant, and Rund, the quartermaster who is to supplant good old Reynolds, all arrived from Washington in time for the service.

The enlisted men, with our big sergeant carrying the flag, marched across the Common to the Cathedral in the cold rain. A pew for K.C. and me with the children. Curious, our reactions. Most of the people were teary. We, stony. We have just been expressing our surprise, and believe it was because

we were praying that the audience would feel it — that the people would wake up — and had little thought of our own small affairs.

The French officers were there, General Edwards and his staff, the Governor and his — and Mayor Curley came, though late. Very decent of him to come at all, and I think he has played a fine, manly, generous, unpolitical rôle in all this, despite what people say of him. I'm beginning to believe those say the most who know the least and are least to be believed. Malcolm Peabody was a fine boyish Chaplain. The Bishop did himself proud. The singing was excellent. And our flags were blessed. My only moment of distress came when one of the children reached over and put a little warm hand in mine, while 'America' was being sung just before we filed out.

Then back to my rooms at the Brigham. Orders issued to entrain to-morrow at 9 A.M. — everything — everybody. Enlisted men to be outfitted and mustered in at Fort Hamilton — nurses ditto by the Red Cross in New York City. Such meagre operating equipment as we have had time to get together boxed, labeled, and carted off. A last-minute flurry on learning that the Chaplain and the five 'civilian employees' — secretaries and dietitians — *must* have properly executed passports accompanied by birth certificates! Many will have had no time for farewells — so be it. Better than to drag along in Boston for another five days before we embark. Patterson, Harmon, and Villaret for Sunday dinner, and then to the Hospital once more for a final afternoon's work.

So here we now are, as nearly ready as circumstances permit, and for almost the first evening in weeks really alone and in peace.

(To be continued)

THE NEW WINE IN GERMANY

BY WILLIAM ORTON

I

It is not difficult, after three thousand miles of travel in Germany, to recognize in one's mind a certain general impression; but it is almost impossible to convey that impression in speech or writing. One has the sense of a tremendous spiritual or psychological fact — overwhelming in its magnitude, urgent in its significance. But since the ingredients of this fact are primarily neither personal nor political, it eludes the scope of both the ordinary news story and the ordinary article. Perhaps the film could do it justice.

A sound film, of course, it would have to be. Drums — no, not the drums first. Silence — the silence that surrounds a great ship coming into harbor; and, somewhere up above, a band playing the new national anthem, the 'Horst Wessel Lied' (never mind who Horst Wessel was, or precisely why he was killed) — a fine music, reserved, steady, powerful in its measure, swinging out in the sunshine over the massed decks, over the narrowing water, over the crowded dock, over thousands of arms held motionless in the splendid gesture of the Fascist salute. Swing the camera along those lines of hands, held tense, not flaccid; close up to the faces; look at the lips, look at the eyes, shining, shining. . . .

Fade-out, all but the music: thousands of voices, men's voices, singing:

'Millions in hope are gazing on our banners;
The day of freedom and of bread comes on.'

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Hess has just finished his July speech at Königsberg: the appeal to the 'front-line fighters' of every land, but especially of France, to get together and fight for peace. No use hoping anything, he says, from the old politicians; sweep them out of the way, as we have done in Germany. The younger generations alone can talk to each other and understand each other. They have no cause for quarrel; they will not let the old men any more intrigue them into killing. At the end comes suddenly the sharp '*Sieg-HEIL — sieg-HEIL — sieg-HEIL!*' And then, when you expect the ragged American cheering, instantly the massed voices in that steady song. It sounds now more like a hymn, much less militaristic and a good deal stronger than 'Onward, Christian Soldiers.'

The tune goes on: boys' voices singing, boys in their clumpy boots tramping late at night through the Roman arches of the Porta Nigra, putting on a final spurt as they pass under the street lamps; young faces, hot and dusty from the country roads; singing their way home, clipping the end of each line so that you hear the tramp of the feet in the song. The packs are getting a bit heavy, the sweat gleams here and there on a young forehead; but look at the eyes — such clear, straight eyes. . . .

Hold one face: a fair-haired, freckled little fifteen-year-old, brown-shirted,

heavily booted, pack on back, standing in the hot sun in the gardens of Sans Souci at Potsdam. He has a retinue of two or three still smaller Brown Shirts, and we all drift along together toward the big fountain. *Amerikaner?* Yes; and he is from Berlin? No, these boys are from Berlin; he is from Breslau. Breslau in Silesia? Yes; he has walked all the way, stopping at the *Jugend-Herbergen*. We are going back to America? Yes. 'And you will tell them about — *Hitler?*' Look at the eyes.

Here is another pair of eyes, wide open in more senses than one; their owner understands our political lingo, has studied in one of the most liberal American institutions. And how she hated the Nazis! 'The more letters my people sent me, the more I hated it all.' She went off to California instead of back to Germany; and then at last came home to see for herself what was happening. 'I saw the *necessity* of it. Nobody had ever explained to me the fundamentals.'

Cut to the Platzl in Munich. The night is hot, the air is thick, and we are packed round the tables with hardly enough elbow room to lift a stein of beer. The terrific energy of those big Bavarian bandsmen, yodelers, dancers, makes one sweat the more in sympathy. Weisz Ferdl comes on, and the house goes up in a roar at his rollicking satire (he has more than once been suppressed for his impudence). A girl leans over to translate a bit of the dialect. Surely there is hardly a lovelier face in Germany; it is like a gardenia in a mass of marigolds. The talk drifts to places, to people. 'You have been in Weimar?' Yes. 'And you saw Hitler? You *saw* him?' A long pause, as she looks far away over the tables. Then suddenly, 'Ah! He is so clean, so strong, so pure!' *Look at the eyes* — transparent, alight, incandescent. No lover ever lit up those eyes like that.

How is it done? The German puts his money down on the counter of the little shop, takes his package from the old lady, and turns to go. '*Danke sehr.*' '*Bitte schön.*' '*Heil Hitler.*' It is almost a formula, casually and quietly said ten million times a day, but it means a little more than 'Thank you — not at all — good-bye'; it means, 'We belong together, you and I, don't we?' The boys crowd round to shake hands, wish you a good trip home again, draw back a step. Up go the hands: 'Heil Hitler!' It means, 'We're your pals really, are n't we?' The business men finish their bargain in the hotel lobby, make a note of the terms, and separate. 'Heil Hitler!' It means, 'This is on the level.' The long argument in the beer cellar comes to an end because the management is anxious to get rid of us all at two in the morning; we separate in the empty street, saying good-bye to these young men we shall never see again. 'Heil Hitler!' It means, 'We trust you to give us a square deal.' The crowd rushes wildly down to the street corner where Hitler is coming by — children, old women, everybody pouring out of the doorways. The Mercedes purrs past — no hullabaloo of motor-cycle police, no soldiers, no warning. He sits in the front seat by the driver, wearing the familiar raincoat, with that half smile on his anxious face, raising his forearm gently up and down as if in blessing on those beseeching hands. 'HEIL HITLER!' It means, in the words of one of the youth songs, 'Germany, you will still stand radiant even if we go under.'

II

Where is it heading, everybody asks? Toward war? Take another look at it, en masse.

Patient, elderly faces line the streets, packing closer as the hours go by, glancing up at the sky, hoping it won't

rain, staring at an occasional big car full of uniforms, waiting for the procession to the stadium. At last it begins, headed by a mounted band and a dozen middle-aged men in white flannels who form a sort of review point at the crossroads. Then come the athletes, walking eight abreast, with bands at frequent intervals, — local bands, with more enthusiasm than training, — and masses and masses of banners elaborately decorated. There are all ages and both sexes, all in white, and all in the highest spirits, waving to friends, singing, saluting their organizers, stepping along in their soft shoes despite a good many sore feet, or waiting good-humoredly while some tangle up ahead gets straightened out and the camera gets a close look at them. Peasant types, for the most part, and all rather undersized; this section of the country does not run to height, and, moreover, this is largely the generation of the food blockade. But what simple, happy folk! The whole business has the air of a huge Sunday-school picnic. By the time they have gone through their exercises it is late afternoon, and many of them are drenched to the skin; but they are required to stand and listen to no less than four typical campaign speeches bellowed at them through loud speakers from the grandstand. The fourth speech is by a really high official who is putting all he has into it — and they are drifting away by the score, tired, anxious to get changed and spend the evening in the beer halls singing about *Gemütlichkeit*.

Here is another procession, in Northern Germany — an S. A. procession, headed by a band and a mass of about thirty identical swastika flags, marching round the town to some sort of meeting. Despite the 'holiday,' these people are in uniform, because they are all leaders. Possibly that is why they don't know how to march — they

look more like the Elks on parade. And here is another speech at a banquet in a far-away town where tourists never come. The soup is over, and a big man in a brown shirt rises to the occasion with the sort of speech he has been making, mostly out of doors, for years of campaigning. It is all about German unity and German greatness and the German love of peace, and it begins fortissimo and proceeds in an unbroken crescendo until one wonders just how strong is that belt around his middle. Near him, in uniform, sits an officer of the Reichswehr. The face is like that of many a British staff officer: high-bred, finely chiseled, reticent, firm, and sensitive. The eyes never lift from the table. The fingers are twirling the stem of a wineglass — round and round and round. Presently they rest on a crust of bread, idly crack it in two, crumble the pieces slowly, slowly, smaller and smaller — flick them aside at last in a single gesture as the hands are raised in polite applause.

It may suit the French to pretend that the Storm Troops are an embryo military organization. The Reichswehr does not think so. The Reichswehr does not regard them even as good raw material. One does not begin the training of a recruit by telling him he is one of the élite and encouraging him to regard himself as a little leader. One begins by telling him he is a pack of rubbish and hammering him for months into the sort of tough homogeneous material out of which real soldiers are painfully fashioned. Watch a Reichswehr officer gravely return the military salute to the enthusiastic Fascist greeting of some brown-shirted *Gauleiter*, and you have the whole story.

But it is not a new story. Hitler himself, seven years ago, describing the Storm Troop system, insisted that it 'must not have anything to do with military organization' — not because

he was anxious to avoid giving offense to anyone, but because the function to be performed was a totally different function. Further, said he, 'it is utterly out of the question to form organizations with any military value for a definite purpose with so-called voluntary discipline.' Then, as always, Hitler knew what he wanted — and insisted on having it, even against the ambitions of some of his closest colleagues.

Further, he may be credited with having foreseen the necessity of a liquidation of the purely campaigning spirit and a drastic purge of the personnel. The one open criticism made by informed opinion in Germany was that he had waited, if anything, too long. Such a purge had been necessary in both Italy and Russia; and there was ample evidence, long before June 30, that it would be necessary in Germany too. Certain elements that had been quite useful in the rough-and-tumble of party propaganda were obviously not capable of assimilation when the party became the government; and large blocks of the party membership of 1933 were too irresponsible, and too raw, to come up to the standard of disinterested idealism that was Hitler's personal passion. Official tactics were crude and harsh enough; the vindictive hooliganism of these people added a number of awkward local situations to the troubles of the transition. Then there was too much money lying around in private pockets of the party; too much unofficial, but inescapable, collecting — until Hitler stopped it by a strict regulation. The overbearing disposition of uniformed nobodies was becoming a nuisance to respectable citizens — until Hitler, by a series of private instructions to the police, gradually removed the last vestiges of civil authority from his party officials, and capped the deflation by the official 'holiday' in June. The ostenta-

tion and love of display on the part of many leaders were becoming a popular joke in Bavaria; Hitler administered a sharp official rebuke which intimated very plainly that that was no road to good standing in the party. When an American 'yellow' journalist, in July, reported in his characteristic style that the remaining Brown Shirts were 'slinking about unobtrusively, almost shamefacedly,' he either did not know, or did not care to add, that the changed demeanor was in direct response to orders.

Nor were the difficulties of the transition confined to the political or to the domestic sphere. Ill-judged local efforts to 'coördinate' — that is, to abolish — the student organizations of the universities led to impossible situations which had to be liquidated by a peremptory change of personnel dictated from Berlin. Anti-Semitism got altogether out of hand; until, when Streicher's organ, *Der Stürmer*, attacked the President of Czechoslovakia, that too had to be temporarily suppressed. Most dangerous of all these 'hang-overs' from the wild campaigning days was the Austrian adventure of the Munich group. Habicht and the Austrian companies had been tolerated to a point at which outside opinion knew better than Hitler what a liability they might prove. Hitler, misled perhaps by his passion for the *Anschluss* and contempt for the Austrians, appears to have underestimated the strength of two factors in the situation: one, the determined imperialism of Mussolini; two, the sickening sentimentality of foreign opinion (backed by foreign money) toward the 'little Chancellor,' whose régime had been far bloodier, and more futile, than Hitler's own. The sudden realization, on the evening of July 25, that Germany was within an inch of international war taught the government a lesson that was symbolized by the immediate concentration

of all authority in Berlin. That marked, in all probability, the final stage of the transition period.

III

Confronted by this transition from party to government, British and American opinion exhibits a reluctance to face the facts that amounts to a positive refusal. Atrocity stories are played up, blunders magnified, oppression emphasized (heaven knows there is plenty of it), until a fair estimate of Hitler and his system is out of the question. There was the same display of stubborn short-sightedness in regard to the Italian and the Russian revolution, but in neither case was the myopia as acute as in this one. The roots of the disease must be exposed, since it renders a realistic attitude to modern Germany impossible.

These roots are psychological. An immediate — but not fundamental — cause of the trouble lies in the tendency of the Western democracies to think exclusively in political terms, whereas what Hitler stands for is much more than a merely political movement. The name 'National Socialist Party' is itself misleading, as the Germans now recognize. It tempts a Westerner to think in terms of politics as he understands politics, to start arguing about the 'programme.' There is — or was — a 'programme,' but nobody in Germany is bothering very much about the little that is left of it. Hitler did not come into power on a programme; he came into power on a tidal wave. The right word is *Bewegung* — the Movement. Hitler did not create this Movement; he adopted it — and was in turn adopted by it. He is said to be number seven in the party's seniority list. And where, in turn, did the Movement come from?

It came straight out of the criminal folly of 1919. As a British observer said recently, 'Between Hitler, as the

ruler of Germany, and the Versailles Treaty there is a line of cause and effect as straight as any line in human affairs can be.' And there lies the root of the difficulty Anglo-American opinion has in facing the tremendous fact of the Third Reich. It is a case of bad conscience. One may know one has done a grievous wrong. One may readily admit the fact — so long as it commits one to nothing. But to see the victim struggle to his feet again, to be required to look him straight in the eye — that is an experience the average person will find endless excuses for evading. Intelligent opinion has recognized for over ten years the wickedness of the treaty. The liberals have talked and talked — and accomplished nothing of any moment. 'I maintain,' said Clemenceau, 'that this treaty, like all treaties, is and can only be a prolongation of war activities until complete fulfillment.' Intelligent opinion everywhere realized that unless that old tiger were muzzled he would ruin Europe; but the treaty stood. Everyone knew that in a world in which one must live with one's neighbors there could be no such thing as 'security' in the French sense; but France continued to dominate diplomacy and the League of Nations. Tardieu's policy of 'reserving to the [French] victims the future benefit that would accrue from the possible revival of the aggressor' was privately denounced as immoral and impracticable; but it was nowhere officially discarded. Tardieu's policy of 'imposing upon Germany the obligation to export' was by no one save Wilson recognized as imposing upon other nations the obligation to import; and Wilson was rejected. The overthrow of liberalism in Germany is the direct result of the failure of liberalism elsewhere; and that is the basic reason why liberals will not and cannot look the facts in the face.

They can, of course, find endless

cause for skepticism and hostility in the candid enmity of the régime to all their ideals; but they cannot see the positive side of the picture. Neither the British nor the Americans have lived under such a disjointed political system as that of pre-Nazi Germany; so they can hardly appreciate the enormous prestige attaching to Hitler's unification of the Reich. Nor have they known the minorities problem as the treaty has bequeathed it to Germany; they cannot therefore understand the passion for totalitarianism and like-mindedness that underlies the crude fallacies of the racial theory.

Least of all can they understand it when official Germany denies that any serious loss is involved in the enforced nationalization of art and culture; yet the denial is deliberate. The passion for like-mindedness demands that persons in positions of authority, in every walk of life, shall be not only well disposed to, but positively active in support of, the new régime. Consider what that means to education, to the schools and universities. The universities used, generally speaking, to elect their presidents annually from their own faculties. Now they have new 'leaders' appointed from outside, whose claims to distinction (if any) are of quite a different sort from those which their colleagues would have looked for. The results in many cases appear almost comic — until one considers the inevitable effect on academic life and German scholarship. Official Germany, however, does not admit that anything is being lost here. In the past — so runs the argument — far too many people were given higher education. The idea that society is best served by giving the maximum number of individuals the maximum amount of training is entirely mistaken. In the future the state will select those most valuable to society (already there are five of the new state boarding schools,

with this as their main objective) and such individuals alone will qualify for complete development. Overemphasis on brain was the grand mistake of the individualist era: 'Mental acrobatics are a sure sign of decay.' The individual — the 'well-rounded personality' — will be developed for the good of the state, not the state for the individual. The school system therefore has three main objectives — body, character, mind (with mind a bad third). The curriculum is being curtailed and concentrated: less mathematics and foreign language study, more German history and biology. There are to be more trade schools and more contact with the soil; all the new institutions will be in the country. Higher education will not involve a greater variety of subjects, but a deepening and broadening of the selected few.

Add to all this the sort of civics and history that is taught to the Hitler Jugend and the Storm Troops, and you have a strong and water-tight system embodying what liberals would call the basic fallacies of the old Germany of Treitschke and Bernhardt. Many of the most gifted men have left the country, not because they had to (in certain cases great efforts were made to restrain them), but because they could not work in such an atmosphere. Yet the new Germany persuades itself that nothing of importance is being sacrificed. Doubtless there is, in certain cases, a temporary loss — so one is told; but a new culture will arise out of this tremendous sense of strength and togetherness (Hitler himself is very keen and confident about it) which will reveal the true genius of the German people without the disintegrating tendencies of internationalism. That such tendencies do exist it is at any rate difficult to deny; as in all such arguments, there is the half truth that is more dangerous than falsehood.

IV

And now remains the paramount question of our attitude to Hitler's Germany. One thing can be said with entire confidence: to attempt any further kind or degree of external coercion is the one way to make war certain. Germany is completely united in the determination to assert her equality of status with other powers; she has the means to do so, and there exists neither the right nor the possibility of preventing her. Hitler has restored to the German people, after the years in which they were the whipping boy of half Europe, their self-respect, their belief in themselves and in their future. It is a tremendous achievement. Henceforth they must be treated as equals and trusted as equals. The Clemenceau-Tardieu policy of projecting war disabilities over the succeeding generations is at an end.

One is tempted sometimes, when the Germans point to their badly drawn frontiers, to the Polish Corridor, to the lost colonies, to remark that any nation which takes the hazard of war must be prepared to abide the consequences, and that such consequences are hardly ever in line with an impartial justice. The argument may be logical, but it is totally irrelevant, especially to this new generation that had nothing to do with the war, the Hohenzollerns, or the signing of the treaty. If Germany wishes to rearm, she has just as much right — in her own eyes, at any rate — as any other power to do so. And in the conduct of other powers — in their failure to disarm, in their military alliances, in their determination to maintain Europe as an armed camp — she has excellent technical justification. Wilson's policy of the good neighbor was deliberately scrapped in favor of the French policy of security by force. That policy has wrought irretrievable damage. It is now bankrupt. Whether

we will or no, we must take the risk of believing in the German people. Any further attempt to hold them in a position of tutelage will strengthen the intransigence of the régime and render war ultimately inevitable. If the truth now appears menacing, it is solely because the truth was rejected when it first appeared in friendlier form. That is how history teaches.

Similar considerations compel one to disapprove the Jewish policy of an organized economic boycott. This, like other forms of external coercion, can only render the ultimate situation still more dangerous. The boycott has inflicted severe injury upon all parties — but most of all, of course, upon Germany, where it fell at the most effective time. Undoubtedly, it has been a severe retribution for the persecution of the Jews; but it has not convinced the Germans of their error, it has not helped the Jews, and its organized continuance will constitute an act of simple revenge. Such revenge would be pardonable under the circumstances if it were at the same time fruitful or constructive. It is in fact, however little one likes to admit it, neither. The world cannot afford it. The Christian communities do not recognize revenge as a principle of social action. And one cannot rebuild the community of good will — in which lies the world's one slender hope — by measures of force.

But, it will be objected, are you not evading the point in all this? Does not Germany herself mean to resort to force the moment she feels able?

The answer, which must be briefly set forth, is threefold. First, it would be well to remember that Mussolini's early official utterances were far more explicitly militaristic than Hitler's (though they did not prevent his securing a large loan in Wall Street) and that his policy has continued to be so. So far there has been no war. The whole business was primarily a move

to push Italy into the front rank of European powers; and, European powers being what they were, it was the only available means to that end. Whether eventually it will mean war depends on the way European policy *as a whole* is handled. The same is true of Germany.

But — secondly — Germany has no present desire to provoke a war; and she has given certain tangible evidences (as Mussolini did not) of this fact. Hitler said, a few weeks ago, that ‘no colony was worth a single German life.’ His lieutenants have repeatedly said that with the return of the Saar there will remain no further cause of quarrel with France. There is good ground for accepting these assurances. But more weighty evidence is supplied by the ten-year treaty with Poland and the agreement recently concluded by Danzig with that state. To anyone who knows at first hand what conditions are like on the eastern border, those two settlements are an impressive demonstration of the will to peace.

But, thirdly, there lurks in the background a genuine danger. The danger lies in Germany’s thoroughly unrealistic attitude to Russia. Communism is conceived to be the enemy primarily because it is not a nationalistic system (not because it is a socialistic system). And being such — so argue the Nazis — it is bound to fail. When one suggests that Germany’s economic future should naturally bring her into increasing and mutually profitable relations with Russia, one is told that Russia, being Communistic, has no economic future and is going to collapse. That is an *a priori* dogma of the sort that always suggests wishful thinking. Now Nazi idealism has all along looked for an extension of territory in Europe — not in Africa; and the coming collapse

of Russia is expected to provide the occasion for it. This, the essential part of Nazi expansionism, has never been officially renounced; and in it lies the source of ultimate peril. It is possible to interpret the agreements with Poland in the light of this expectation. How should this situation be handled?

The only maxim that can be laid down with assurance is the one already stated: namely, that no good can come of further attempts, whether military or economic, to coerce Germany. The nation has enough to do, for years to come, in the reshaping of its domestic economy, particularly in East Prussia; this is freely admitted in responsible quarters. During those years every effort must be made to win Germany back, spiritually as well as politically, to the community of nations. Of that community the League is the sole existing instrument; and, once she is assured of genuine equality of status, Germany will be glad to return to it. Isolation is now, as before the war, the German nightmare.

Further, it must not be forgotten that the increased tension in the international situation has accurately paralleled the world-wide economic depression. A reopening of the channels of international trade will have immediately favorable effects in the political sphere; and the economic risks involved in that reopening will be less, on the whole, than the political risks involved in the present deadlock. This applies with particular force to Germany. Germany has learned about all the lessons there are in adversity; and granting — as her actions frequently remind us — that she still has a lot to learn, it is in the book of prosperity that our hope for her, as for ourselves, should lie.

CINDERELLA AT PUKA-PUKA

BY ROBERT DEAN FRISBIE

I

It was a fine night with plenty of moon to brighten the wide outer beach by Windward Village. Beni, one of the unemployed of Puka-Puka since the trading station was closed, sat with me on a mat under the pandanus trees. We smoked and stared abstractedly across the narrow stretch of water to where the old Pacific hemmed and hawed and scratched her chest on the coral barrier. A hundred or more of our neighbors were grouped about us, and on the beach they mottled the sand with shadowy patches. Above the rumble of the surf we could hear the shrill cries of children surf-boarding across the reef. It was one of those nights that compensate for the loneliness of remote atolls — atolls lonelier than ever now, for during the past years trading vessels, one by one, have abandoned them.

'Times have changed,' Beni said presently. 'We used to trade eight coconuts for a stick of tobacco, and there was free home-brew in the trading station.'

'Yes,' I muttered, 'but why speak about it? . . . There's Jupiter rising above the sea; the Magellan Clouds low to the southwest. What was that story you told me about the Magellan Clouds?'

'The last trader paid us only five dollars a ton for our copra, and now we can't sell it at any price,' Beni went on, ignoring my question. 'The old men's pipes are cold. Even William is giving

up trying to smoke coconut husk. He'll be cadging tobacco from you again to-morrow.'

'And I'll give him some. But come, Beni, we must rehearse. The people are waiting for us. There's Cinderella, as pretty as a picture, flirting with the Prince. She shouldn't do that until the fourth act.'

'They can wait,' Beni mumbled. 'You remember when Captain Viggo used to come three times a year, and copra was sixty dollars a ton? Ah, Ropati, your station was full of lollies and talcum powder and squeaking shoes in those days. And when we had the May Day festivals the people would run whooping into the churchyard with presents of boxes of matches and pennies for the dancers. This year they'll be giving coconuts.' He spoke this last in a tone of disgust.

I tapped the ashes out of my pipe, turned to Beni, and spoke sharply. 'If you are going to rehearse you'll have to do it now,' I said. 'I did n't come out here to listen to you growl about the copra market.'

My ex-storeboy rose with a grunt of resignation and stepped into the moonlight. 'Then I shall pray,' he said to me. 'Afterward you can tell us the story.'

When the people of Windward Village had gathered round him, Beni led them in a lengthy prayer, while I lay back to recall imperfectly the story of

Cinderella and decide what kind of version would be acceptable to my neighbors. In a few days we were to have the annual May Day festival; and this year each of the three villages had decided to give a secular play as well as the usual Biblical one. There were rumors that an Aitutaki man at Leeward Village had made a great red dragon that would snap its biscuit-tin jaws and roll its coconut eyes, and that a wonderful story had been built around this monster. We all knew that Central Village was rehearsing a mummery about Big Stomach, the ancient superman. I had promised to teach Windward Village 'Cinderella.'

I told them the story when Beni had finished his prayer. They grasped the spirit as well as the details of it immediately, but some of the old and experienced men thought it might be improved. Then the Village Fathers held council and the cast was chosen:

The Prince.....	Village-Dandy George
Cinderella's Father.....	Mr. Scratch
The Millionaire's Valet.....	Deacon Bribery
The Village Parson.....	Beni
Cinderella.....	Miss Tern
The Fairy Godmother....	Hefty Mrs. Piki-Piki
Cinderella's Mother.....	Bosun-woman
Cinderella's Stepmother.....	Mrs. Sea Foam

Dancers, musicians, gravediggers, courtroom audience, soldiers in the Prince's Army, policemen, a judge, sailors on the American Millionaire's yacht, etc.

I could not see how some of these characters fitted into the story of Cinderella; but I said nothing, for I have lived here, off and on, for many years, and I am aware that the good people have their own way of interpreting things.

II

I refilled my pipe and, after lighting it, lay back on the mat. It was comfortable on the outer beach that night, for there were no mosquitoes, and the wind, freshened by its long passage over the sea, caressed me with cool and

delectable fingers. I felt physically and mentally well, satisfied, unconcerned whether or not a vessel ever touched at Puka-Puka again. We had been told that copra was not worth buying, that a trader would lose money accepting it as a gift, and that no more vessels would come to Puka-Puka save an occasional man-o'-war to ascertain that one of the island possessions had not shifted its latitude and longitude. Then the trading station was closed and we were told politely to go to the devil — or revert to savagery, which we are doing with amazing ease and rapidity.

'It took a long time to daub a thin coat of civilization on the South Sea islanders,' I thought, staring at the curious shadows moving among the angular limbs of the pandanus trees. 'It took hundreds of years to develop a semblance of what we call civilization; but in five years the people will return to as primitive a state as existed in the days before Captain Cook. And I shall watch them discard the last of their civilized manners as the last of the old calico gowns and denim trousers are replaced by grass skirts and loin cloths! It will be a salutary change, interesting to observe.'

'For dust thou art, and unto dust shalt thou return,' Beni intoned the burial service solemnly. Shifting my position, I could see him standing over Bosun-woman, who was lying prostrate upon the sand. Mourners crouched around the woman, wailing and giggling; a few gravediggers stood nonchalantly at one side.

'What are you doing, Beni?' I called. 'There is no burial in "Cinderella."'

'Hush, Ropati, I am about to pray,' Beni informed me.

'What, again? There is no prayer in "Cinderella."'

Beni's tone became petulant. 'We are burying Cinderella's mother,' he said. 'You did not tell us the begin-

ning of the story, but we guessed it. We have had the birth scene, and we have decided that Cinderella's mother would have to die before her father could marry the widow-woman with two daughters. Of course there might be a divorce, but that would make two court scenes.'

'No, no, Beni!' I broke in. 'She died. Go ahead, I won't interrupt again.'

Beni was praying fervently when I rolled over and again lit my pipe. Presently I heard someone cry: 'Now the American Millionaire comes in his yacht with his valet and Cinderella! He sees a fine widow-woman with two daughters! Whoop! They're going to get married! Where's Beni? Marry them, Beni!'

'Their heads have been full of American millionaires ever since the *Zaca* lay off the reef and the San Francisco banker came ashore,' I reflected. 'It was the first yacht they ever saw.'

I heard Beni marry the American Millionaire to the widow-woman with two daughters; but from then on, for a long time, I paid little attention to the rehearsal. My mind wandered into the treasure chests of memory. 'How unreal the gems are!' I thought as I recalled my wanderings far away from Puka-Puka. 'There was the rough passage to San Francisco in the *Tagua*, my first European meal in ten years, an aeroplane ride, a radio concert, the maddening white men who asked me where I would be "to-morrow afternoon at two o'clock." As though I should know where I should be at any given time! They could not understand a person who chained himself to no itinerary. And I could not understand them. During that short trip to San Francisco I realized that I had lost touch with civilization forever; that I had nothing in common with the people of my own race. "But you must know where you will be to-morrow after-

noon at two o'clock," they would insist; and I would reply: "I am walking up the street now. I may turn to the right and I may turn to the left — it depends upon my mood when I come to the crossroads."

"Are you not traveling toward some destination?"

"No; I have no destination in mind. I have lived in Puka-Puka so long that my acts are governed by feeling, not by reason."

"What a futile life!"

"Perhaps; but I do not feel that it is futile and I do not court regret by reasoning about it; and there is at least the element of surprise which is lacking in orderly existence. Why make a task rather than a pleasure of life? If, in strolling through life, your ultimate goal and all the way stations thereto are anticipated, you will derive as little pleasure from the realization of your expectations as a cinema actor derives from watching the projection of a film in which he has played. We easy-going islanders live in a continual state of mild surprise. Not expecting anything to happen, we are pleasantly surprised to find that things happen in spite of our improvidence."

"You can't make money that way," people told me; and I replied that I did not want to make money. From then on they avoided me. Lonelier than ever I had been on remote Puka-Puka, I turned toward that island; but I waited six years before the chance came to ship in a tiny yawl, and finally to be landed among my people. And when Beni and William carried me over the reef in their canoe it came to me strongly that I had never left Puka-Puka; all those years of pointless wandering receded into the misty past; I had just been out to Captain Viggo's schooner for an hour's visit, and now I was returning to the trading station where Mama had my tea ready and old Bones was waiting to trade a score of

coconuts for a mouth organ. But I had not been ashore long before I realized that economic troubles in an astronomically remote world had affected Puka-Puka life. The old men's pipes were cold. There were other changes, too—all for the good, I thought, in my perverse way.'

III

'Right, left! Right, left! Halt! Vuni, twoi!' George the Prince shouted, breaking into my reminiscences. The column of soldiers came to a halt before Cinderella's house, the drums were silenced.

George shifted his weight from his right to his left foot, scratched his head and roared: 'Where is the American Millionaire?'

Cinderella's father appeared, accompanied by his valet. Both of them shook hands with the Prince and exchanged a few commonplaces about the fishing and the taro crop.

'How are things in the palace?' the father asked.

'Not too bad,' the Prince replied. 'How is everything with you?'

'So-so,' said the father.

'So-so,' echoed the valet.

Then the American Millionaire asked the Prince what business had brought him that way.

'There will be a great dance in my palace to-night,' George informed Mr. Scratch, 'and I have come with my army and my musicians to invite you and your valet and your wife and your daughters. I am going to marry the girl who loses her silver slipper at midnight to-night.'

'Wait a minute!' I shouted; but no one paid any attention, for just then the drums boomed, and George bellowed: 'Forward, march! Vuni, twoi! Right turn! Vuni, twoi! Left turn! Vuni, twoi!'

The army marched down the beach, turned to the right, turned to the

left, and then got terribly mixed up trying to do a flank movement, whereupon everybody laughed and decided that it would be fun to rehearse the scene again—only this time they would have more marching, and perhaps a little mock battle in which all the warriors of the other villages are killed.

IV

Presently the moon looked straight down on us, shining tranquilly over the waste of golden sand, the foam-stippled shallows. The moonlight glinted on the sleek pandanus leaves; it glowed on the naked backs of the actors, and revealed among the shadows of the shore brush groups of children squatting as silently as tropic-bird fledglings. Behind me the polished coconut fronds were crystallized into motionless jade; then, with a breath of wind, they moved gently, the pandanus leaves clattered with a metallic sound, a low mutter came from the outer reef.

'Damn the coconut husk!' I heard from somewhere among the trees. 'I'd trade my old woman for a smoke of niggerhead!'

I did not turn, for I do not believe in indulging godless old William with too much attention. He is conceited enough as it is. It was not long before he had hobbled on to the mat and slumped down beside me.

'Son of a gun! The devil!' he growled in English; then, changing to Puka-Pukan: 'Well, I must have a smoke, that's all there is to it.' He started filling his greasy old pipe with coconut husk, grumbling as he did so: 'Times are hard when old whaler-men have to smoke this stuff.' He fumbled for a long time among his ragged clothes before he produced a box of matches; then he extracted one, held it an inch or two from the box as though about to strike it, and, turning his

beady little eyes toward me, gave me a glance so pregnant with meaning that it was all but audible.

'Yes, William,' I said flippantly. 'I intended to give you some tobacco, but I wanted you to enjoy it doubly by having first the pleasure of anticipation.' With that I gave him my tin. He unloaded his pipe with a sputter of profanity, remarking to the effect that he wanted tobacco, not anticipation; then he filled it from my tin and smoked with noisy satisfaction.

'I was just thinking, William,' I stated, 'that we Puka-Pukans are governed by feeling, not reason. Our futures are no more planned than was the battle scene in "Cinderella." This is well and good, for though there is pleasure in anticipating an event, there is also a good deal of grief in disappointment. You enjoyed planning how you would cadge a smoke from me; but think of your grief and disgust had I let you smoke the coconut husk!'

'I knew I'd get the tobacco,' William growled; but I ignored him. Grief in disappointment brought me back to the present-day world's grief and its influence upon native life. I said, with a gesture meant to take in the whole of Puka-Puka:—

'There are changes, William. Grass skirts and loin cloths are taking the place of calico and denim. After striking their last matches, the old men have started rubbing their fire-logs. Old Bones is teaching the younger generation to fashion fishhooks from mother-of-pearl and tortoise shell; and as the old cotton fishlines break, new ones are rolled out from *rongaa* bark—better ones, too. Now the coconut-oil lamp flickers beside the empty kerosene one; and because the missionaries made clothes *the*'—I laid stress on the article—'principal tenet of their religion, our neighbors will discard Christianity as they discard their Christian clothes.'

'That'll be fine!' William the Heathen broke in.

'Don't interrupt me, William. . . . They will call themselves Christians for many years to come; but Jesus and Jehovah will soon be obscured in a fog of heresy; one by one the old gods will return; and if, a century from now, the copra market improves and it is decided to rechristianize the South Seas, the new army of missionaries will find the natives as heathen as in the days when their brethren first brought the Word to distant islands. And all this, William, is because the price of copra has fallen!'

'You're pretty long-winded to-night, Ropati. What you mean is that so long as we have tobacco we'll have Christianity. Well, I can stand the Church . . . but coconut husk—bah!' The last few words came in a sputtering sound similar to what I had heard a moment before when he blew through his empty pipe.

'How true that coconut oil civilized the South Seas!' I went on. 'Save for a very few missionaries and adventurers, foreigners would have left the islands alone had they not needed more oil for soap-making and margarin. And now that they need no more oil, they *are* leaving the natives to shift for themselves. All their pretended altruism is being shown for what it is worth. I believe that within a few years illiteracy, idolatry, and even cannibalism will appear again in the outlying islands; and, unless it becomes profitable to suppress these evils, the outside world will ignore them, or, at most, change their politics to a sanctimonious *laissez faire*.'

'They are having the court scene,' William said, changing the subject.

'The what?'

'The court scene! Wha's a matta? Chief of Police Ura is fining them for dancing after curfew at the Prince's ball.'

'Oh, I see! They've dovetailed a court scene into "Cinderella." I wonder why they don't leave Cinderella out of it altogether, and call the play "Life at Puka-Puka"?'

'That's a good idea!' William exclaimed. 'That Cinderella story was about the foolishlest one I ever heard. It's lucky the Puka-Pukans had enough sense to add the death and the burial and the millionaire's yacht and all the other little details.'

'There are no Cinderellas at Puka-Puka,' I said musingly, suddenly aware that the world's greatest fairy tale could not be appreciated by these people.

'Hell and Satan! Of course not! All the girls here get their share of the coconuts and the taro whether they have stepmothers or not; and if a girl doesn't like her relations she doesn't have to live with them; and if she's a good-looker she gets a good man without losing a silver slipper or telling tales to a fat fairy godmother. I'll just fill my pipe again and go over to the Village Fathers. I want to advise them to leave Cinderella out of the story.'

V

I must have dozed, or, Puka-Puka-fashion, just been oblivious of the passage of time, for when I rose to return to my wattle-and-thatch house on the lagoon beach the moon lay low over the pandanus trees, and the outer beach was limned with shadow pictures that stretched nearly to the shallows. The reef thundered with the incoming tide. I started to sing — a habit I indulge in only when alone: —

'I'm a pilgrim, I'm a stranger,
Rough and thorny is the road. . . .'

'Nonsense!'

The word was snapped testily from the dense foliage above me.

'Why, William, I thought you had gone home!'

'I sleep here nowadays, and I don't like to be bothered by lubbers who sing out of tune,' my old friend grumbled from the darkness. 'I got a hammock. No mosquitoes here. The rest of the people will start sleeping on the outer beach when their mosquito nets rot away.'

'Hm, yes — back to the old customs, eh?'

A great sea thundered along the reef. I turned to watch the foaming water sweep across the shallows; then I raised my eyes a little to stare across the sea. How empty and lonely it seemed!

Presently I asked William if the Village Fathers had decided to leave Cinderella out of the play.

'No,' he muttered; 'they are going to make her the Prince's sister, and she is going to marry the American Millionaire, who will start a trading station at Puka-Puka.'

Bidding William good-night, I turned down the trail to the lagoon beach and trod the glistening sand to my house. It was very silent and lonely in the little wattle-and-thatch home, so I lighted the lamp and, drawing a steamer chair to the table, sat down to read.

It seemed that only a moment later I glanced up to find the lagoon, like a nether sky, bright with the reflections of the clouds, and old William standing at the doorway, bidding me good-morning as he fingered his cold and empty pipe.

THE COLORS OF NATURE

BY CHARLES D. STEWART

A MAN plants his garden in the spring, and out of the selfsame back-yard soil he gets the white of the lily, the blue of the violet, and the damask of the rose. The rains come down to water it, and when the storm is over the rainbow sets itself in the sky with all the seven sisters of light. The humming bird and the pigeon come to visit him, and as they move in the beams of noon they flash back metallic lustres to the sun. At evening the sun goes down and the heavens unlock their treasures of color. They play upon the eye with the tints of the opal and the pearl; and then the moon comes up like a red balloon and turns to silver as it rises. And when the season is over, and the crops are gathered, and nature has felt the frosts of fall, there is a sudden, astonishing glory in the oak, the maple, and the birch.

All these things are the peculiar goal and property of Art.

But how comes it that this patch of garden clay can do such diverse things with a package of garden seed? How is it that the humming bird, the peacock, and the pigeon can get such rich hues out of the gross material of earth? And the rainbow — how does it maintain itself and stand with such unwavering steadiness in this deluge of falling drops?

All this is Science. And what is Science but the answer to questions?

I

Any man who knows that yellow paint mixed with blue will produce the

color of grass knows by experience that yellow can lose itself in green. He probably has discovered also that red added to yellow will make orange, and that some of this may be concealed in the green, making it a deeper hue. And this will enable him to understand how the forest changes its colors in the fall.

Chlorophyll is the green pigment in leaves which enables them to derive energy from the sun. But while the coloring matter in leaves is predominantly green, there are four parts to it: a light green, a blue-green, a yellow, and an orange. When cold weather comes on, the tree hastens to call in the valuable substance from the leaves and store it away for another season. It is the green coloring matter that is called in, leaving the two yellows behind; and thus for a few short days the trees take on the colorful pageantry of autumn. While the green has chemical powers that constitute the very life of vegetation, the function of the two shades of yellow is but imperfectly known.

All summer the tree has been making sugar in the leaves and withdrawing the sugar for purposes of life and growth; but in the fall it takes sudden action with regard to the precious material of life itself, and saves all it can. It must act promptly before the leaves cast themselves loose and carry all this valuable substance away. The tree is a builder; it is a sentient creature with a regard for the future. As a

builder it needs to have a certain wisdom and foresight of its own. Knowing it thus, we might say that the tree was the first Conservationist.

If color is a blessing, Americans need to be thankful for the humming bird, a creature peculiar to America. The rest of the world does not know it. And they need to be grateful for the spectacle of fall, a feast of color that the English have little conception of. And here I am reminded of an anecdote.

Our first notable landscape painter, Thomas Cole, went to England in 1829 with a selection of his paintings to be put on exhibition. The English came, and saw, and were far from conquered. The foliage of this man's trees was all bright red and yellow! As such a thing was never seen in nature as they knew it, they felt that this was a school of art that needed to be nipped in the bud; and so the critics pooh-poohed, and the visitors had many a jovial nudge over the young artist and his new departure in painting.

Our autumns always create surprise. Dean Hole, of Rochester Cathedral, who came to see us in 1895, was an admirer of flowers. He was enamored of their fragrances, their colors, and their forms. He loved to see 'a rose looking in at the window.' Coming here with such an eye for beauty, he went to Central Park. Imagine his surprise when he saw its trees at the height of their autumn hues. He tried to write about it, using adjective after adjective. Then he gave it up and simply said, 'Let my poor British brother try to imagine a poinsettia grown into a tree.'

II

The coloring of the hair and skin of the higher animals is accomplished by means of a colorless chemical acted

upon by a ferment. This corresponds somewhat to modern practices in the art of dyeing. Wool, for instance, is dipped into a colorless derivative of naphthalene, and then it is oxidized to produce a beautiful brown. The chemist calls such a compound a chromogen. It is the antecedent of a pigment. The physiologist has the same name for the compound which Nature uses in coloring animals; but he is inclined to call it, more romantically, mother-of-pigment.

All the higher animals have this chromogen, whether human or not, and whether white or black. The pigment produced when the ferment acts upon it may be orange, yellow, red, brown, or chocolate deepening into black; and so, by a mixture of hues, there may be grays of any shade. The basic chemical is a protein—the lean-meat principle, which is nitrogenous—broken down into an amino acid; and there is a variety of ferments, some of which have been discovered and named, producing the variety of effects. The white man has this mother-of-pigment in his skin, but he has the ferment only in his hair; whereas the black man has it all over in a potent form. The white man may tan, but there is a limit to his coloring and he bleaches out again. These ferments evidently act to some extent by means of oxygen. The effects of peroxide of hydrogen when used as an article of the toilet show the power of oxygen over the animal pigments. By its use the dark-haired Rebecca of yesterday comes forth to-morrow as the fair Imogene. But Nature, not to be outdone, proceeds to push the hair forth again, black at the roots.

Gray hair occurs when the pigment is no longer supplied. When it is lacking, the natural color of the hair is gray, not white. In white hair we have something quite different. There are in nature what are known as structural

color effects; and in this class belongs a white or other hue that is produced without the use of a pigment. That there can be white without any white matter in it may be proved by melting a snowball or by allowing a lily to wilt. In the case of the snowball the thousands of little crystals totally reflect the light, producing the sensation of white upon the eye; and in the lily a multitude of bubbles of air in the integument have the same effect. In the case of human hair, if air infiltrates and takes the place of the pigment when it leaves, all the colors of light are reflected, and that is white itself. Thus the crown of white hair is a special gift. It is a vestiture of light which one possesses in common with the lily, the swan, and the foam of the sea.

III

When we consider the coloring of plants we find that the most delicate and gorgeous effects are attained by pigments developed from sugar. These, the anthocyanins or so-called flower pigments, include blues, pinks, magentas, and even the most gorgeous of reds. They are of great scope, from the blue of the cornflower to the red of the apple and the most flamelike and deeper reds of the maple and the oak. Despite this astonishing range of color, there is but a slight change from the molecule of the one to the molecule of the other — how slight has only recently been discovered. These anthocyanins are blue or violet except when acted upon by acid, when they are red. They are anything but yellow.

As there are but three basic colors in nature, and any hue may be mixed out of three pigments, red, blue, and yellow, it will be seen that the garden soil can achieve its great variety of work with a very limited palette. The seven colors of the rainbow are but the three primary colors lapping over and blend-

ing at the edges, the violet at one end being the blue merging into darkness.

And now in taking up yellow, the other color in the trinity, we have got to go back for a moment to the coloring matter of the trees, the grass, and all verdant vegetation. We have already said that the two valuable chlorophylls — the one that is simply green and the one that is bluish green — are not to be considered merely as color, but as an indispensable substance which is responsible for the chemistry of plant life and therefore of all life on the globe. It uses sunlight to manufacture food out of carbon in the air. These leaf colors, whether the two greens or the two yellows, do not float about in the cell sap, as do the other colors we have been considering, but are produced and kept in separate little bodies in the cells called plastids. Like the animal colors, the greens have nitrogen in them, this being of the very substance of life itself. When the two greens are gone in autumn, and stored away in the tree, the two yellows are left in the leaf. These, the pure yellow and the one that is inclined to orange, are fatty pigments. They are widely distributed in nature. In the fatty pigments or lipochromes there are also reds, purples, and blues. Since animals, like plants, are made up of proteins, fats, and sugar, we might expect that some of the pigments of the one would occur in the other; and we find that this is true especially of the fatty pigments. They occur in the yellow spot of the eye, the purple of the retina, the yellow of the yolk of eggs, the orange of the carrot, and the red of the tomato.

In trees, while the lipochromes are responsible for the yellow such as we see in the willow, the maple, and the ash, the bright and flaming reds are made out of sugar, being due to an excess of sugar that remains in the leaf when cold weather comes on. This

combines with other substances; and in the oak it combines with tannin, thus producing the red effect. To the yellow hidden in the chlorophyll of the leaf we owe the yellow and gold of butter.

IV

There is yet another kingdom of color: the sunset cloud and the blue of the noonday sky. If we would know it we must learn that light is invisible. It is invisible in the sense that if you are in a dark place, and the sun shines in, its beam cannot be seen as you look across it.

When we consider how often we have seen light coming in at a keyhole or shining through a crack in the door, this must seem like a misstatement; but it is not. If all dust is taken out of the air of a dark room, the beam of light immediately disappears. It continues to come in, but cannot be seen. If you put an object in its path, the object will be in full light, but without any indication of the light's pathway. You may even place a glass vessel of pure distilled water before the opening and there will be no sign of the light passing through the water. But if you blow some smoke into the air, or raise a dust, the air thus filled lights up at once. And if you drop a little milk or other dispersible substance into the water, the path of the beam can be seen. What we see is the reflected light from innumerable particles in the air or water.

We learn from this that wherever there is color there is substance. This being true, it is evident that the blue sky is substance. So far as we can see it, we are seeing something material. The blue color consists of reflection from matter dispersed in fine particles throughout the atmosphere. These suspended particles are not merely in the upper air, where the blue seems to be, but all through it, with the coarser particles below. Thus the sky is at our

elbow, and the blue is the total effect of all the fine matter in the air as far as it extends. It is not the atmosphere that is colored; we are seeing substance that makes itself visible by reflection, as all substance does.

The wave lengths of the various colors in white light range from about $\frac{1}{50,000}$ of an inch for the blue to $\frac{1}{30,000}$ of an inch for the red. The reason the sky is blue is that such very fine particles of matter catch and reflect the short waves, the blue, more than they do the red. The color of the matter in space is blue because of its state of fine division, regardless of what color it might be in the mass.

It has generally been considered by physicists that the sky above our atmosphere would appear black. The reports of balloonists seem to lend proof to this view. Piccard saw the upper air as a deep blue verging into purple. In the past year it has been argued that there must be some star dust, however attenuated, in space, and that this, being illuminated by the stars, would show a light blue. It will receive attention as a theory. But still we may hold to the old teaching that if space is empty of dust it will be black. Though we might see the stars by their light impinging directly upon the eye, all else between would be dark. Without reflection there can be no illumination and no color.

When the sun is setting, and almost at the horizon, it has to travel a much greater distance through the atmosphere in reaching the eye. The short waves of light, the blue, are scattered; and only the long waves, the red, are transmitted through so great a thickness of the laden air.

The full moon, rising, always takes us aback by its redness and its swollen proportions. And here we are confronted by an astonishing fact. It has been found, by actual measurement, that the image made upon the seeing

surface of the eye, the retina, is no larger when the moon is rising than when it is high up in the sky. We only think it is larger. We unconsciously compare it for size with the distant objects to which it seems so near; and we misinterpret. In short, it is not our eyes that are lying to us — it is our mind.

V

What sort of color does Nature use on a humming bird? How does she paint the metallic hues on a peacock's tail? And how does she set the rainbow on a pigeon's breast? The answer is that there are no such colors on these birds. We see them, but they are not there. It is all a magical effect, and in order to see how it is done we must take account of a few plain facts in physics.

It is natural for us to think that two lights are brighter than one light and that two noises are louder than one noise, but this is not necessarily true. The scientist can make two lights come together in such a way that darkness is produced; and he can make one sound, as of a tuning fork, impose itself upon another equal sound in such manner that the result is silence. In other words, he can make one wave length of sound or light kill off or blot out a part of the other sound or light; and this effect, produced not merely in the laboratory but in nature itself, is known as 'interference.' It plays a great part in modern scientific theory; and the fact that interference occurs in connection with light is the strongest proof that light is of a wavelike nature. The coloring of birds that we are now considering, opalescent, changing, and metallic, is caused by the fact that a part of the light, on the way to the eye, is interfered with and blotted out, leaving the rest of the light to strike the eye with the colors that are left.

The effect is produced by a very thin, transparent film or coating on

the surface of the feathers; and the mechanism of it is interesting.

Light moves forward in lateral undulations comparable to the waves in water. Suppose that on a smooth sheet of water two circles of waves are propagated at the same moment. If, when they approach one another and come together, wave encounters wave and hollow coincides with hollow, these waves will combine their forces into still higher waves with corresponding deep hollows between. But if the waves of one meet the hollows of the other, they will nullify one another and produce smooth water. If the waves are a foot from crest to crest, six inches of delay will cause wave and hollow to meet; and instead of the matching of wave and wave, on top of one another, we shall have the wave upon the hollow which cancels the motion and is known as interference. Hence the rule that interference is caused by the delay, so to speak, of half a wave length, or any odd number of half wave lengths. In waves of color, as of water, complete coincidence intensifies, while the opposite effect cancels or kills off.

In the case of the transparent film, the light that strikes the upper surface is partly reflected from that point to the eye, while the rest passes on through and is reflected to the eye from the under surface of the film. The ray of light that comes from the under surface, being delayed by that extra journey, falls somewhat behind the rays that were reflected from the upper surface. This delay, being just enough to cause the waves to strike in and join the other waves of light half a wave length behind some particular color, will produce the obliteration or killing off of that color; and in consequence the white light, being robbed of part of its color, will shine with the color that is left.

But how does it happen that this

journey through the film, in and out again, is just enough to produce that half wave length of delay?

It must be remembered that the rainbow colors into which light can be split do not consist merely of the seven colors to which we have given names, but also of blended colors in between. From the short waves of the blue to the long waves of the red there is really an infinity of wave lengths or imperceptibly blending hues; and so, naturally, the delay of light in going through any thin film will fit in as a half wave length somewhere along the graduated scale of color. If it does not kill off one hue or wave length, it will kill off another.

The same point on the surface of a film does not always show the same color, all depending upon the angle from which you view it. If you are looking at it directly from the front, the distance through the film is small; if you look at it less directly, the distance is greater; these varying thicknesses affect the color that comes to the eye from different positions. Since light or color shines from any point in all directions, diffusely, it creates an infinitude of conditions for the eye to encounter.

To sum up: In the peacock and such iridescent birds there is a ground color of pigment, usually dark, upon which the iridescent effect is imposed. Thus two means of coloring are combined — the pigment method and the merely physical or mechanical. The brilliant hues that attract our attention are not due to the pigment, but purely to the interference of light waves.

VI

This may seem a great deal of explanation to bring to bear upon a dove's breast; but knowledge is knowledge. If one studies the Einstein theory, he will find that it took its

origin in the Michelson-Morley experiment, in Cleveland, Ohio. This experiment, to determine whether there is really a stationary ether in space, was based upon this phenomenon of the interference of light. And so a little understanding of how light waves may interfere with one another may be of use to one when he puts into action that long-delayed intention of finding out just what the Einstein theory is all about.

If one wishes to contemplate the effect of 'interference,' let him look upon the play of color in a pearl, whose beauty is all due to the fact that it is built up in fine layers which have the effect of transparent film; or let him regard the delightful hues of the opal, a jewel that plays with light because it too is structurally made up of layers of substance and of air. And if one has not a pearl, an opal, a peacock, or a humming bird, let him spill a layer of colorless kerosene on a surface of water and take account of its iridescence in the sun. Or a soap bubble will do.

One may see nature from the point of view of the artist or that of the scientist. Certainly there can be no interference between the two. 'Beauty is truth, truth beauty.' And sometimes I have wondered whether Keats did not say even more than he was aware of when he produced that line.

VII

One white-clouded day in summer the evening came on very quietly. The lake lost all motion and became a mirror. The landscape was like a picture. After watching it awhile my wife and I went down the bank and along the wooded shore to where our canoe was lying; and then, with a stroke of the paddles, we floated off into the midst of it.

Some loons and mud hens moved

along in the distance with V-shaped wakes behind them; and we made a like mark with our canoe. The trees along the shore were reflected in every verdant detail. The hill across the lake stood upside down in the water. The woods and fields on the hill could all be seen plainly below; and when a girl made her appearance on a high slope in a white dress we first became aware of her presence in the water. The clouds, now turning pink, were reflected too; and the checkered loon was redoubled in the water.

As the sun verged toward the horizon the clouds became pinker and some deepened into red. My wife and I began to pay more attention to the scene below. The sky became more pink and fiery, and the pink reached out more toward the zenith. Gradually it wiped out all other reflections by the mere assertion of color; and thus it claimed the whole depth and surface of the lake.

As we looked into this nether world of clouds the scene became deeper and deeper, and yet more deep. We had started out on a good substantial surface of water, and now we were suspended above all this, a colorful heaven below us. Far down we could

see roseate balconies hanging in space. There was a red tumult of billowy shapes for us to gaze at; and then, as the sun went lower, a spectacle of fiery crags and an abyss of fearful conflagrations. Instead of floating on a daylight surface, our smooth supporting medium seemed to have vanished. And, as we now took glances below, the dizzy scene seemed more and more fearful.

'Shall we go back home?' I asked her.

'Oh, yes. Let us get out of this,' she answered.

When you turn your back on a spectre it does not help matters any, especially when you can still see the thing you are fleeing from.

After a quarter of a mile we reached the point of our peninsula and skimmed round on the shady side and thus to shore. And I, for my part, was glad to be there. 'Long heath, brown furze, anything'—I was glad of a good opaque place whereon to stand.

That was many years ago, and the experience still keeps a place in our minds. Of all adventures by land or water, one of the tightest squeaks we ever had was our escape from that sunset.

WIDOWED

BY JANE AYER COBB

I

Two hours before, the house had been murmurous with the hushed voices of people speaking in whispers while they made inroads on Mary's ham and chocolate cake. Now it was empty. The parlor, no longer stimulated by the undertaker's potted palms, had relapsed into its familiar, red-plush primness, and was already beginning to smell musty. The shades were drawn. Wilted petals had been swept from the floors. The remains of the food were put away.

Mary wiped the dish pan, turned it upside down on the drain board, and stood for a moment, her wet hands dripping above the sink. They were worn and tired hands. Her plain round face was colorless. Her eyes held a look of childlike bewilderment.

Myra, of course, had offered to stay. 'You'll need someone with you,' Myra had said. 'It's not good to be alone just at first.'

'I guess I'd rather be by myself, if you don't mind, Myra,' Mary had answered firmly. And so Myra had gone, her gaunt face troubled.

A wave of fatigue swept over Mary. She turned from the sink and her glance wandered about the kitchen, resting in turn upon the scarred wood box, the battered stove, and the stained drain board. The worn spots in the dark linoleum stared up at her. They were deepest before the stove and the sink.

She reached up for the roller towel and then paused. The towel was clean. There was no brown smudge where Henry had wiped his face and hands without having washed them enough. How often she had snapped at Henry for dirtying her towel. Now it was stiff and alien.

II

The house was strangely silent.

Well, she must n't stand here. There were the evening chores to be done, the stock to feed. Jim Taylor, awed and silent in the presence of grief, had milked old Boss, and fed and watered Bill and Charlie, the plough horses. That left only the chickens and the pair of geese Henry had been fattening for Christmas.

The loose boards of the back porch creaked under her feet. She closed the door behind her and stood leaning against it for a moment while the evening breeze blew wisps of damp hair across her face. The red barn loomed big in the rainy twilight. There was still light enough to see the yellow of the leaves on the great maple outside its door. Silky, the collie, emerged, wagging, from his bed behind the wash-tub, and Mary was grateful for his greeting.

The tangled grass along the edge of the path was turning brown. It caught at her skirts as she passed, and her shoes became clotted with mud. Silky

picked his way delicately among the puddles and paused in the momentary dryness of the woodshed. The wood was getting low. She would have to get her winter supply from George Davis soon.

The twilight darkness of the barn was warm and sweet-scented and very still. Mary felt a little shock of surprise not to see Henry's lean form moving among the shadows, not to hear his gruff commands to the horses. She dipped into the feed box and let the smooth grains of corn drip through her fingers on to the pan. Their gentle 'tunking' was loud in the stillness.

Mary was careful not to spill any of the corn on the floor, or in the covered passageway to the henhouse. Henry had always fussed when he came across spilt kernels.

'I'm not spending good money to feed rats,' he would say, and Mary always felt a stab of resentment. She had bought the grain herself out of her egg money, and, besides, there were no rats in the barn. But now she could not spill the grain. Poor Henry. He had been a good man.

The hens were restless and hungry and she did not have to call them. They crowded around her feet, snatching up the yellow corn. The geese were still missing.

'Here, Columbus! Here, Queenie!' Mary called. A sound of beating wings and honking rose from the weedy duck pond, and after a moment two stately forms appeared over the bank and waddled toward her. Queenie's pace remained dignified, even haughty, when she saw the corn in Mary's outstretched hand, but Columbus hurled himself forward, his great wings half lifting him from the ground. His little eyes glittered. Mary scattered the corn before him, and he had gobbled half of it before Queenie reached the spot.

She ignored him and paddled without haste or hesitation to the golden

spatter at Mary's feet. She selected a grain and reached for it with deliberation, but Columbus's eagerness was too quick for her. He jostled against her, almost upsetting her balance, and the grain disappeared in his darting yellow bill. Queenie's dignity deserted her. She flew at him with a low, vicious hiss and pecked him away. Mary laughed. For the remainder of the meal Queenie stood in the centre of the corn, but Columbus dived between Mary's feet as often as he dared.

'That's the way men are,' Mary said to Queenie. 'Anything there is — they think they own it. Many's the time I've wanted to peck my Henry!'

But Henry was dead. She would never see him again, and the house was dark in the purple twilight. There were no lights in the windows.

She locked the geese in the hencoop and called Silky. The wind blew the shadows of leaves from the maple and they followed her, ghostlike, up the path. It was too dark to see her way on the back porch, and she stumbled against strange objects. Henry always got in before she did and lit the lamp. Mary groped uncertainly in the dark kitchen before she found the matches.

The glow of the lamp created shapeless shadows which crouched in the corners, vaguely menacing. They followed her about the house while she locked the doors, shut the windows, and pulled the shades. Blackness closed behind her as she climbed the stairs.

Myra had taken Henry's things out of the bedroom, and it was very neat. Henry's trousers were not on the chair and his sweaty shirt was not hanging from the door knob. The patchwork quilt on the bed was very smooth.

Mary put the lamp on the bureau. Her eyes avoided the empty room. She undressed slowly, hanging her gingham dress in the closet, folding her undergarments carefully on the straight-backed chair. No gruff mascu-

line complaints broke the chill silence. The scent of tobacco had died from the room.

Mary turned down the lamp, watching the shadows creep farther and farther out of the corners until they engulfed her.

The linen sheets were cold, and Mary lay cramped on the edge of the bed, as she had done when Henry was lying slantwise across three quarters of it. She could not sprawl on Henry's side of the bed. The coldness of the sheets rejected her. The darkness was heavy with loneliness.

III

She awakened with an overwhelming sense of being entirely unprotected and heard her own voice calling desperately, 'Henry! *Henry*—' The room was pitch-dark, and for a moment the strident combination of wild cackling and hysterical crowing in the hen yard beat unrecognized against her benumbed brain. Then she understood.

'Oh, my!' Mary said. 'Oh, my!' She fell back on the pillow. The fox had gotten into the hen yard again.

She must get up, she told herself firmly. She *must* get up! She must find Henry's shotgun and shoot the fox. Henry would want her to shoot it. But Henry was n't there. All her exhausted body rebelled at the thought of going out into the dark and the rain. Sleep drifted over her before she could force herself out of bed.

When she awoke gray morning was in the room.

'My land!' Mary said. She put on shoes and stockings and slipped a coat over her nightgown. With guilty haste her feet pattered down the back stairs and splashed through the puddles on the path to the henhouse. A weak sun was trying unsuccessfully to pierce the restless clouds. From somewhere in the maple a bird chirped uncertainly.

The hen yard was agitated with

millling white forms. Mary counted the hens anxiously. There was still a note of hysteria in their clucking and they edged away from a hole under the fence, but they were all there. Queenie was running from the henhouse to the yard, honking. But Columbus was gone. Splashes of blood, a few wisps of red fur, and a scattering of gray feathers told the story.

Mary sighed. It could have been much worse, of course, but she had liked Columbus.

'He was a fine bird,' she said regretfully, as she blocked the hole under the fence with stones.

Queenie had gone through the barn and was pushing against the henhouse door from inside. Mary opened it for her and the pink, webbed feet splashed through the wet grass to the duck pond.

Mary called to her while she was feeding the chickens, but Queenie was slow in coming. When she finally appeared she paid no attention to the corn Mary tossed toward her. Her clear-gray body disappeared in the gloom of the barn.

She was still in the barn when Mary came back an hour later. The gray feathers were disheveled now, but she continued her patient search, poking behind the harnesses and under wagons. She even managed to climb up into the hayloft, from which she descended in a whirl of beating wings.

Mary poured a pail of foaming milk into a big pewter-colored can. 'It's no use,' she said gently, as she watched Queenie waddle off to search the yard again. 'You can't find him. He's gone — like my Henry.'

All the morning Mary watched Queenie's hurrying distress. The ruffled, fat body squeezed behind the woodpile and emerged again to peer under the porch. No cranny in the stone wall beyond the barn escaped her. She went again and again to the

same places, her bill swinging from side to side in an attempt to look everywhere at once. Mary could n't get the unhappy creature out of her mind. Sweeping off the back steps, she saw the gray figure perched precariously on the woodpile trying to look into the ice house.

'Why, she feels almost like me, the poor soul,' Mary said aloud.

The worried note in Queenie's honking grew louder, but it was not until noon that she acknowledged herself defeated. Mary saw her straggle wearily over to the big maple and crouch close to the bark. Her head was drawn far into her feathered ruff.

IV

Queenie remained there, motionless, while the afternoon grew colder and the heavy clouds thickened and dissolved again in occasional spatters of rain. Silky barked playfully at her, but she only drew her head farther into her ruff. Yellow leaves drifted down on to her back, but she did not move to shake them off. She was still sitting there when Mary returned to the house after the evening chores were done.

'Yes, I know,' Mary said to the forlorn figure. 'He pestered the life out of you when he was alive, and now he's gone you wish he was back to pester you.' She held out a handful of corn. 'You'd better try and eat something,' Mary said, awkwardly. Queenie did not move.

Mary scattered the corn before her and went away. Her own loneliness lay heavy upon her. All day she had tried to bury it under little jobs — mending or making gingerbread. There was no one to mend for, no one to eat the gingerbread.

At the back steps she paused. The house was unnaturally still. Mary hesitated and then sat down on the bottom step, her head propped on her worn hands. Her eyes stared unseeing at the horizon. Below the bank of leaden clouds in the west a red stain from the hidden sunset drained through. The air was cold and there was no one near her.

She did not hear a rustling in the leaves or the sound of soft webbed feet on the hard-packed earth. She was only conscious, suddenly, of a friendly warmth, close to her. She groped toward it and her fingers sank deep in smooth feathers. After a moment she felt a light, firm pressure on her knee. It was Queenie's head. With tender fingers Mary stroked its soft grayness.

They remained so, in a long silence. Soothed by each other, they listened to the grave lowing of cows in the barn. Around them falling leaves whispered in the dusk, and from down the valley the deep baying of a dog came to them on the wind. The sound was thin and far away. Slowly the twilight flowed down upon them, its shadowy purple closing around them in coolness and in peace.

LABOR'S BROKEN FRONT

BY GEORGE E. SOKOLSKY

I

ONE basic fact must underlie any consideration of the labor problem: namely, that 40,000,000 Americans have been reduced to the poverty line because 10,000,000 men are out of work. This bitterly cold fact has stood practically unchanged during the whole of the depression and the recovery. It is beginning to take on the characteristics of permanence. It is being used as the justification for alterations in the character of American political and social institutions; it has already forced upon us a vast extension of the functions of government.

It is not easy for the average citizen to realize that at the present time the most absorbing business of the American government is relief. Most of the efforts toward recovery and reform are, in reality, relief measures. Every state, every county and parish and municipal unit of government, faces the single problem of relief. The objective has been stated crudely in the slogan, 'One third of the American people shall not starve.' Every agency of government, therefore, concerns itself directly with the personal problems of the 10,000,000 unemployed and their families. This forces the official mind in the United States to be more conscious of the worker and his desires and needs than has been usual in this country.

It is this fact of unemployment that makes any impartial and realistic analysis of the labor problem difficult.

Constantly the spectre of starving millions causes capital and the consumer as well as labor leaders to forget that laws passed, moves once made, permanently affect the social and economic structure, that steps taken as emergency measures are rarely retraced.

For instance, the NIRA was a temporary expedient to be tried for two years. It was assumed, when it was passed, that recovery would be an accomplishment at the end of that period. Instead, under the NRA, a reorganization of the industrial and commercial structure of the United States has been brought about which is taking on the characteristics of permanence. There can be little doubt that the next Congress will be requested by the President and will agree to enact legislation for its continuance over a longer period and for perpetuating some of its organizations and institutions. Far too much has been done under its provisions to permit a hasty and sudden abandonment of it. Too rarely do we realize that, from the point of view of the social and economic structure, there are no temporary measures. Every tittle of change becomes a step in the process of evolution, progressive or retrogressive.

One of the steps taken by the government to deal with the problem of unemployment under the NIRA was the protection of the rights of the worker to organize for collective bar-

gaining. This measure, part of a temporary relief programme during a period of depression, has effected social and economic changes that are altogether different from the intention at the time, which was merely to protect employed workers against suffering the consequences of a glut of the labor market by surplus workers. These social and economic changes must be faced objectively. Current labor disturbances, for example, cannot be considered as a temporary upheaval due to anger at hunger and unemployment, but as a response of the worker to his newly found rights under the NIRA and as a strategic campaign of an organized *minority* among the workers to utilize national misfortune to seize the balance of political power in the state, and, by occupying this pivotal position, force the government to conform to its wishes. The phrase 'organized minority' seems to me to apply exactly to the A. F. of L., for here it is clear that leaders of about 3 per cent of the people of this country are seeking to determine the objectives of labor and the character and functions of government in every economic field.

A distinction must be made, for clarity, between the industrial worker as an individual, organized labor, and the American Federation of Labor. Most industrial labor in the United States either is unorganized or is organized in unions not controlled by the American Federation of Labor. The average worker does not function politically as a worker at all (compare Republican-Democratic vote with Socialist-Communist vote). He has no ideological basis for his demands, but pursues a bread-and-butter policy of trying to get more wages and shorter working hours with the least trouble. Again, a distinction must be made between organized labor and the A. F. of L., for organized labor includes the company and Communist unions as well

as the A. F. of L. In this article, the three categories will, then, be made distinct — namely, the worker as an individual, organized labor, and the A. F. of L.

II

No group of workers, with the possible exception of the Communists, has a clearly defined programme. The average worker cares nothing about programmes; he wants to work and to eat under the most favorable circumstances. Both the company unions and the A. F. of L. are opportunistic, taking advantage of every occasion to strengthen their hold upon the newly created political agencies established by the government under the NIRA. The A. F. of L., however, has assumed a voice and a manner of leadership and responsibility which become increasingly dangerous as its leaders become increasingly muddle-headed as to principles and purposes. To this ideological confusion we shall now address ourselves.

Section 7(a) of the NIRA has undoubtedly afforded ample justification to the A. F. of L. to assume that the time has come when it should make, even by the use of direct actionist methods, an attempt to establish itself as the dominant political minority group in this country. The labor leaders naturally believe that this is their moment, for the government in Washington is bound by law to protect organized labor, not only against the capitalist, but against individualistic tendencies among the workers themselves. The law requires labor to organize, and the implication is that it would be preferable for it to organize into One Big Union. The A. F. of L. is conducting a campaign to make itself the One Big Union.

The Communists alone have a clear-cut and unmistakable programme for labor and society. It is that the govern-

ment shall become a dictatorship of the proletariat; that the means of production and distribution shall be taken over by a Soviet of Labor Deputies — by the workers themselves. From the Marxian hypothesis, this is an historical inevitability. American labor leaders prefer the term 'National Unionism' to 'Soviet of Labor Deputies,' but when the trend and the effort are viewed objectively the direction pursued by both groups is identical, because when once the proletariat is recognized as a distinct class in the political and social life of the country, and when it is required by law to organize as a class, then the Marxian class struggle becomes a positive factor in the relations between labor and the rest of the people of the country.

Even the undoubtedly sincere opposition of the A. F. of L. leaders to Communism does not change a pigment in the picture. The contest between the A. F. of L. and the Communist unions is a political conflict as to which particular group shall dominate the central organ of the workers recognized by Section 7(a). No matter how this particular contest may resolve itself, whichever group controls the central organ, the One Big Union can, under the circumstances, place itself in exactly the same pivotal position vis-à-vis government which Lenin and Trotsky employed when they represented a fractional minority with headquarters at the Smolny Institute. The opposition to Communism by Matthew Woll, Vice President of the Federation, cannot guarantee that the Communists will not seize control of the Federation if and when the One Big Union is successful. As long as the government recognizes the principle of majorities in labor representation, a Communist majority is as legal as an anti-Communist majority. Earl Browder, Secretary of the Communist Party of the United States, has, according to a press

statement, announced that his party will attempt to gain control at the next convention of the A. F. of L. From a legal point of view, if he gains a majority, he has as much right to head the Federation as Mr. Green.

Whether organized labor functions through the A. F. of L. or the Communist unions, it faces the fact that in a country like the United States the industrial workers are a minority. To succeed in achieving the political force of One Big Union, it is necessary that they should be organized into a single, potent body, which can, if necessary, utterly cripple the means of production and distribution. Nothing is made; nothing moves. In pursuance of this objective, the Communists employ the proletarian revolution, the Federation employs the strike. The distinction, in practice, is one of intensity.

In a modern state, the destruction of the means of industrial production impoverishes both the 'white-collar class' and the farmers, because the curtailment of production of manufactured goods results in a rise in prices which serves to reduce the actual income of these classes. But the farmer is further affected by impediments, arising from railroad and trucking strikes, to the movement of his produce, usually perishable goods, to favorable markets.

Theoretically, then, industrial labor does not need the assistance of the white-collar class and the farmers to accomplish its dictatorship. It cripples, impoverishes, reduces both groups until they plead for mercy and are accepted into the dictatorship of the proletariat on the industrial worker's terms.

This is Marxian theory. In practice, the real problem is to get the One Big Union — the worker's soviet — organized, and to attempt by whatever means are available to gain control over the agencies of government. In the United States, the One Big Union idea has not yet taken sufficient hold of the imagi-

nation and will of the worker to accomplish this objective.

Organized labor has, however, been assisted by certain factors, particularly by the effort of the government to *control* the means of production and distribution through the NRA, the RFC, the AAA, and cognate organizations. This control of industry and of the means of distribution arose through a complex of forces: the depression, the psychological paralysis of American capitalism, the want of leadership in the Hoover Administration, the ballyhoo of recovery, the experimental efforts of the Roosevelt Administration. These gave to the A. F. of L., as the most articulate organ of workers, the opportunity to make demands which capital, the white-collar class, and the farmers could not resist in the circumstance of the distress which faced forty million Americans. Strategically utilizing this distress, labor strengthened its legal position until to-day, since the decision in the Houde Case to which reference will be made elsewhere, the One Big Union idea is implied by law.

Resistance to the efforts of the A. F. of L. should have come from the American capitalists. In the face, however, of national distress, capitalism adopted a conciliatory and opportunistic, nay, even a cowardly attitude. The American capitalists could only think of saving what they had accumulated, and capitulated over details in the hope that labor would at some point be satisfied. But it is axiomatic in situations of this type that organized labor is never satisfied. Compliance with one set of demands only encourages the presentation of another set. The forty-eight-hour week became the forty-hour week, and it is now the thirty-hour week. And this is true as regards wages and every other question.

Capital exists only because there are profits in the means of production and

distribution. Remove the profit motive and capital has gone out of existence. There is a department store in New York which advertises that it will do business for a year on a non-profit-making basis. If the advertisement is true, and I assume that it is, this shop is offering nothing that most enterprises in the United States have not done since 1929 — namely, operated on a non-profit-making basis. In a word, capitalism has hardly functioned during the depression. It is not functioning much more effectively to-day.

Capital becomes sterile when it does not replenish itself by profits. There can be no question, under the capitalist system, of producing goods merely because there is a social necessity for them. Capitalism does not operate on that yardstick; its yardstick is profit. When, therefore, the government, by controlling operations and prices and by excessive taxes, and labor, by increasing demands upon industry, wipe out not only profits but the prospect of profits, then capital withdraws from industrial enterprises. Plants are closed down and dismantled. But the government cannot tolerate non-productivity, because that imperils the existence of the state. It therefore must operate the plants to maintain the state. It moves from *control* to *operation*, from *operation* to *ownership*. The last stage is Communism.

Only now, as these processes assert themselves with more distinctness, is it becoming evident to the A. F. of L. and to the administration that the forces let loose by the NIRA tend toward the dissolution of the American economic and political system. They appear now to be cognizant of the fact that recovery without profits cannot be achieved under the capitalist system. But neither the A. F. of L. nor the administration advocates Communism; hence the current confusion.

For example, in the textile industry

the wage struggle between organized capital and organized labor under the codes is over the division of profits. That is, capital maintains that it is unable to establish profits if wages are increased in a stagnant market; labor maintains that there is a maldistribution of wealth in the United States because an unduly large share of the profits of industry goes to capital and management. Organized labor seeks to effect a new division of profits. It is somewhat difficult to understand how this can be accomplished when actually there are no profits. The A. F. of L. does not face this problem realistically, for it does not believe that the American industrial worker will support the elimination of the profit motive; yet it must, for political reasons, continue to demand increased wages and shorter hours.

The pressure of this conflict falls upon the white-collar class, which cannot resist because it is a dependent class, getting its livelihood either from the capitalists, as vice presidents or clerks, or from the state, as officials or school-teachers. Besides, the depression had the effect of lowering the morale of this class, which in the United States, as in France and Great Britain, provides the bulk of the investors in capitalistic enterprises. The fall in stocks and bonds, the reduction in salaries and personnel, caused persons in this class to lose their homes, their insurance policies, their sense of well-being and security. Many were reduced to relief or private charity. Objectively, the conclusion must be reached that on the whole this class was the principal sufferer from the depression, has been the least benefited by the recovery, and is, in fact, slowly becoming part of the proletariat.

It is significant that this class, which in the United States has usually represented the liberal democratic point of view, has whole-heartedly supported the

New Deal and the objectives of organized labor. It is this class which has provided the intellectual façade for the Roosevelt Administration. It is this class which is now most frightened by the political ambitions of labor, standing confounded by the conflict between the emotion of liberalism and the necessity for security.

The American farmer has usually been antagonistic to industrial labor and to the effects of organized labor upon the price of manufactured goods. He was, however, given the opiate of the AAA, which, up to the drought, seemed to be of some value. Since the drought, the American farmer has been reduced to physical dependence upon the government. Whether demanding cheap money from Congress or relief from the administration, the farmer is in a sorry plight.

Organized labor thus finds itself in the powerful position not only of being protected by the government, but of being the only element which has the strength and purpose to fight for what it wants. It alone does not vacillate. It alone moves in a straight line, in the direction of One Big Union. Its weakness lies not in the politics of organized labor, but in its inability to bring the whole of American labor into One Big Union.

III

What is it, then, that the A. F. of L., as the vocal agent of the worker, demands of the country, so that it can gratify the wishes of all the workers and persuade them to join the One Big Union?

Quite apart from idealistic considerations, the leaders of the A. F. of L. must show results. Their popularity with the workers who pay dues to the unions depends upon constant successes. There can, then, be no limits to the demands of organized labor. The leaders cannot stop. If they stop, the

unions lose their membership. From the standpoint of the A. F. of L., this is a correct view. The Federation is a service organization operating to win for its members tangible benefits whenever the opportunity offers. According to Marxian dialectic, this is the class struggle, the laborers forming a solid phalanx which may give way but never retreats.

Mr. Richberg, in his *Report on the Progress of National Recovery*, cites the following as the achievements of labor.

The work week has been reduced, from June 1933 to June 1934, approximately six hours for all industry. . . . Average hourly earnings have been increased about 26 per cent. . . .

Labor organization has shown a corresponding increase [to trade associations], more than 2,000,000 workers having been added to the A. F. of L., with large increases also in the number and memberships of labor organizations not affiliated with the A. F. of L. The increase of numbers and memberships of so-called 'company unions' (even though not regarded by the national unions as adequate labor organizations) marks at least an increase in mechanisms of labor association available for the collective bargaining contemplated in the act.

This much has been accomplished, but the labor leaders cannot stop and yet hold their gains. Hours must be further reduced, wages must be increased, and, to prove their strength, the 'mechanisms of labor association' must be brought within the Federation as the One Big Union. For the labor leader, as a salaried official of organized labor, must prove at the next convention of the A. F. of L. that he has done more in the period between June 1934 to June 1935 than he accomplished during the period to which Mr. Richberg addresses himself. And that will prove true for every succeeding period. It is the necessity for never stopping that makes organized labor such a sinister force in the community, if the

community desires to remain capitalistic and democratic. For, should all the possible demands of labor be granted, then profits must disappear and Communism is inevitable.

It is the psychology of capital always to compromise, because capital hopes to find some way, some labor-saving device, some bookkeeping method, some amalgamation of overhead, which will make profits possible. It is the psychology of organized labor never really to compromise on essentials, because its goal is to transfer profits from capital to labor by any process which may at any time be available. Even when labor leaders most violently denounce Communism, the strategy of the labor movement is to give labor an increasingly greater share of the profits of industry, until no share of profits shall remain for capital. That is Communism.

IV

We have discussed theory and tactics; purposes and strategy; aspirations and conflicts. We now come down to the immediate effectiveness of the efforts of the A. F. of L., first, to dominate labor through the One Big Union idea, and, secondly, to form at least a partnership with the administration in controlling the economic and social policy of the government. In response to my two previous articles on this subject, I have received several letters asking for evidence either that labor as a whole does not prefer the A. F. of L. or that the workers in any industry prefer the company union. It has been contended that I have no positive data to prove either statement. And quite rightly, for no data exist on either side of this subject which can be accepted as scientifically accurate. Nevertheless, my conclusions are not mere guesses; they are the result of objective analysis of all the factors in the labor situation.

These questions require definition. When I or anyone else suggests that labor as a whole in the United States does not prefer the A. F. of L. to the Communist or company unions or to unorganized individualism, he must accept a statistical definition of 'labor as a whole' — namely, that if there are 28,000,000 workers in industry at the moment, and only 4,000,000 are in the Federation, in spite of open government support, then labor as a whole does not accept the A. F. of L. But we can analyze these figures further. If, in 1929, 38,000,000 were gainfully employed in industry, and 10,000,000 are unemployed owing to the depression, then 28,000,000 are gainfully employed in industry. If it were known exactly how many of those registered in labor unions as members are actually unemployed and that number were deducted from the total membership, it would make the ratio of the A. F. of L. workers to those not in the A. F. of L. more accurately comparable. In a word, the formula is the ratio between workers minus unemployed and A. F. of L. members minus A. F. of L. members unemployed. Such an exercise in subtraction would prove the figure of *employed* workers who are members of the A. F. of L. to be much lower than their statement of membership. That figure is unavailable.

This is a statistical method of reaching an objective conclusion. But there is another method. Since organized labor has assumed an aggressive attitude as to its rights under the NIRA, a number of strikes have taken place. Some of these strikes were started by Communists, but for all of them either the A. F. of L. or one of its constituents assumed responsibility. In the steel and automobile strikes, it was clear that neither the claims nor the demands of the A. F. of L., as a national union, were supported by the workers. For this reason the steel strike did not

occur; for this reason the automobile strike was a failure. In San Francisco, it almost appeared that organized labor had achieved unity, but the general strike was a sham and even Mr. Green had to repudiate it. When I say that it was a sham, I mean that the A. F. of L. at first tried to take credit for a strike which Communists organized, and then got frightened when the Communists nearly succeeded in carrying it through. To prevent the success of a competing One Big Union group, the A. F. of L. temporarily went to the aid of the capitalists. The San Francisco strike, then, does not add to the evidence that the workers support, in any majority numbers, the A. F. of L.

The crucial test is the textile strike.¹ In that effort the A. F. of L. is adopting new tactics. In the first place, it is functioning on a vertical basis, which is against its stated principles — that is, an entire industry, instead of just one craft in the industry, is being called out. Secondly, related industries, producing competing goods, are also being called out. Altogether organized labor claims that it can withdraw 600,000 men from work, which is substantially the total employment in that industry. When the strike was actually called, not more than 50 per cent of the workers in the textile mills are reported to have responded. The labor leaders admit that they lack funds to carry through such a strike, but depend upon government subsidies in the form of relief for striking workers on the ground that they are unemployed. If the government provides this subsidy, then the strike takes on the aspect of a government-subsidized strike — that is, the government is paying men and women to strike, which will tremendously strengthen the A. F. of L., for it then becomes an agency of

¹ This article was written while the textile strike was taking place. It has since ended in failure for the workers. — AUTHOR

government in a struggle with capital. The problems here are obviously complicated and cannot be discussed objectively while the strike is taking place.

From this analysis it is possible to reach the conclusion that up to the textile strike, beginning on September 4, no major strike organized by the A. F. of L. during 1933-1934 proved that the majority of the workers favored the A. F. of L. On the contrary, in the two basic industries — steel and automobiles — the evidence points rather to the fact that the workers favor the company union. After a fortnight of the textile strike, available data and indications do not prove the solidarity of labor behind the A. F. of L. in this industry.

No one has ever polled the whole of industrial labor to determine whether the company union or the A. F. of L. or a Communist union is favored. Such a poll could only be conclusive if conducted by secret ballot under the most rigid control to prevent intimidation by interested parties. Without the results of such a poll for guidance, a conclusion as to the attitude of labor can only be reached by the processes which I employ in this article.

There are two considerations which assist in gathering all the threads together: —

1. The incontestable fact is that between the end of the war and the introduction of the NIRA the membership and influence of the American Federation of Labor steadily declined. The present membership of the A. F. of L., then, must be regarded not as wholly voluntary, but as accelerated by organized labor on the ground that joining is in line with the policy of the government. Men join on the supposition that if they do not they will be excluded from jobs under the collective-bargaining provisions 7(a) of the NIRA. The present increase in membership, as

small as it is in comparison with the total employment in industry, cannot be accepted as a normal gauge of the decision of labor as to national unionism. Nevertheless, national unionism may, under the NIRA, become the dominant labor system of the country whether the workers desire it or not.

Two decisions assist organized labor. One is the decision of Judge Samuel Rosenman, one of the original Brain Trusters and a friend of Mr. Roosevelt, that a plant cannot be moved to take advantage of cheaper labor. Of course Judge Rosenman's decision is based upon the assumption that a company, having entered into a contractual relationship with labor and the government under the code, cannot commit a breach of contract. But he did not enjoin the government from giving a regional preference to a competitor, nor did he guarantee profits as he guaranteed wages. The effect of Judge Rosenman's decision, if it can stand up in the Supreme Court, would be to invalidate the mobility of capital upon which profits often depend.

Mr. Richberg says, in his report, that failures in 1934 were 40 per cent less than in 1929, which is careless handling of statistical material, because from 1929 to June 1932 American industry and trade went through a period of deflation, amalgamation, and reorganization, so that by March 1933 it was possible to start at scratch. To analyze this situation adequately, it will be wisest to take June 1933 as a base — that is, the period when the NIRA became effective and labor began to make demands — and to wait until June 1935, when it should go out of existence under the law, to see what it did to industry and business. Even if the NRA does not go out of existence, this two-year period would form a reasonable bracket for a judgment. Unquestionably Judge Rosenman's decision will play some rôle in the closing

of small plants in higher-wage areas under the codes.

The other decision is that of the National Labor Relations Board in the Houde Case, that the majority, and not proportional representation, shall determine the organ for collective bargaining. In some industries, such as steel, motor cars, and some smaller units, the majority may be with the company unions, but in many industries organized labor and capital will vie with each other to win the majority. This decision, made at the tense moment of the textile strike, assures the country endless labor troubles. Labor leaders believe that it will, on the whole, strengthen organized labor as the vocal medium for collective bargaining. Capital plans to fight this decision in the courts.

2. A psychological factor may be employed in this general consideration of factors leading to a conclusion as to the will of the workers. Every strike is accompanied by picketing and rioting. Workers who would continue to work are intimidated by strong-arm methods. The first photographs in the textile strike showed workers outside a plant in the South preventing a motor truck from reaching the plant. Picketing is legal and rioting is unavoidable in labor troubles. Capital employs gangsters and private detectives, and there may be an element of provocation in all strikes.

From the point of view of mass psychology, particularly in areas where the plant composes the total population or a very large part of it, there ought to be no need for picketing or mass pressure if solidarity of labor is a reality. If the total or a majority of labor sincerely supported their leaders, there would be no scabs unless imported from outside the region. If the majority of workers supported organized labor, there would be no scabs to import. The fact is that scabs are always available

for any purpose, not only among unskilled workers, but among the most highly skilled.

In other countries there has, at times, been evidence of such solidarity. In the United States, for reasons explained in some detail in my two previous articles, such solidarity does not exist. The American worker remains an individualist because he aspires to become a capitalist. The dominant American tradition, Puritanism, is individualistic. The dominant American psychological trait, coming down from the pioneer to the captain of industry, is individualism. It is this characteristic which confounds Mr. Green and Mr. Woll, who act in the direction of Communism and speak in the direction of individualism. Workers may at a moment join a labor organization for some immediate benefit, but as long as the profit motive continues to function the average American worker remains a capitalist. Such workers' organizations as the A. F. of L. and even the Socialist Party fight Communism more bitterly than any organization of capitalists, because they are conscious of the average American worker's repugnance to collectivism. This one psychological factor upsets all calculations as to the solidarity of labor. It is the fundamental impediment to the One Big Union idea.

V

Therefore, with all the cards stacked in its favor, organized labor has not won a single major strike since the NIRA went into effect. A few 'face-saving' devices have been arranged, but in each of the major strikes — steel, motor cars, Minneapolis, San Francisco, Harriman — organized labor has not succeeded in winning an unequivocal victory.

This failure has been demonstrated in spite of the reluctance and inability

of capital to employ its most severe weapon — shutting down the plant — and in spite of active government support of labor.

Were there labor solidarity, the total of employed and unemployed workers would be in the American Federation of Labor, and the government would to-day be completely dominated by One Big Union. Even the Communists would enter the Federation and then try to seize the central organ. That would bring the issue to a head and labor would find itself in conflict with a reducing capitalist class that would withdraw from industry and throw its plants into the lap of the NRA and the RFC, and with a fighting farmer class that would resist being reduced to peasantry and peonage to feed the city workers.

But that crisis has not arrived and does not arrive because the A. F. of L. cannot achieve labor solidarity behind itself. Nor is there any likelihood that organized labor will succeed, because its leaders have missed several crucial opportunities. One is the wording of Section 7(a), which from their point of view should have designated the A. F. of L. as the organ for collective bargaining. Another is the failure of labor leaders to pack the NRA with their own representatives. The third, which in my opinion is the most serious, is the inability of organized labor to develop enough statesmanship to realize that without the farmers labor cannot really dominate the country. To win the farmers to their cause, labor should have accepted a lower wage, so that prices for manufactured goods might be lower. Finally, although labor is beginning to realize that the day of the horizontal union is passing, the A. F. of L. fears the vertical union because it leads either to Communism or to the company union, both of which the Federation must oppose to survive as a political organization.

If this were a country like Russia, or even Great Britain, it would be possible to divide the people into two strict categories, labor and agriculture. But in the United States that cannot be done. We are more like China or Japan, where labor and agriculture are interchangeable. This tendency is growing increasingly marked as more first-generation immigrants take to the farms, the Poles, Czechs, and Italians following in the footsteps of the Scandinavians and Germans. Industrial workers, particularly away from New York and the Atlantic Coast cities, are more often than is generally supposed members of agricultural households. Such workers cannot be class-conscious in a struggle between labor and agriculture over prices, because their family livelihood is made up from returns from both activities, and the expenditures are affected as much by the losses in agrarian life as by the gains in industry through the activities of organized labor. To this must be added the factor of increasing taxation, which severely reduces the actual net income for living costs in agricultural as well as industrial families.

VI

Any attempt to appraise the attitude of labor must take into consideration all these factors. If the United States were passing through a proletarian revolution, they would have to be viewed differently, for then the entire population would divide over the single issue of the dictatorship of the proletariat. But that is not the issue to-day. For the average worker, the issue is more money for less work, and to that he says 'amen' until he discovers that more money does not mean more goods, or more clothes or a better house. Then he will turn on his labor leaders, and incidentally on the 'New Deal,' as he did after the Wilson Administration.

As the average worker is not class-conscious, he has a measure that is surer than any wholesale price statistics put out by the government and banks. That measure is what happens to his dollar after his wife gets it. He knows when he is being told the truth, because his food and his clothes and his tax bill talk a language he can't misunderstand when money begins to shrink in value. He is willing to follow his labor leaders as long as they can produce more food and clothing and better houses — and no longer. It is easy enough to lead men to strike for more money, but it is hard to hold them together when the money gets them nothing.

It is exactly this axiom that the labor leaders face, and it is that which stimulates more demands. If the labor leaders could hold their cohorts together now, they would stop their agitation and consolidate the gains they have made under the NIRA. They dare not stop, they cannot stop, because they are not sure of their follow-

ing. And they are not sure of their following because they cannot carry their following along with them on ideological slogans, as in Russia or Italy, but must guarantee to the worker increasing income on the capitalistic basis of society.

Without an ideological basis, without an ideal other than bread and butter, it is impossible for the A. F. of L. to achieve workers' solidarity. For each worker is an opportunist who determines for himself what his personal benefits will be in each situation. He does not function for a class; he functions for himself. He is not led over a long period; he strives to stand alone and get what he can. He wearies quickly of ideologies and mass tactics, and asks the eternal American question: 'Where do I get off?' It is this characteristic individualism that makes the One Big Union idea impotent; it is this that is responsible for the inability of the A. F. of L. to formulate a programme and plan for American labor.

THE CONTRIBUTORS' CLUB

THE POSTMAN

It would undoubtedly have been better for Frank Lawton if he had never written his first story. However, he did write it, and he sold it. Not long after that he sold another one, and then he was licked. He gave up a perfectly good job, and moved out into the country to free-lance. For a while things went well enough, but then, for what reason I have no idea, his work began to fall off. He began getting rejections.

Of course, from the very start of his free-lance career, Lawton found himself very much concerned with the postman. He lived on an R. F. D. route, and this meant that the postman's arrival in the morning was extremely inconsistent. Some mornings he arrived at ten, and sometimes it would be almost one o'clock in the afternoon. When this happened, Lawton would become increasingly restless as the morning wore on. By eleven-thirty it was utterly impossible for him to concentrate on what he was writing. Every quarter of an hour he would get up and go to look in his mail box on the theory that the postman might have gone by without his seeing him. This never happened, because his workroom window looked directly out on the road.

After he had looked in the box two or three times, he would go out on the road and gaze down it in the direction from which the postman came. There was a bend in the road, and, if the mail was *very* late, he would walk down to the bend. This permitted him to see about a quarter of a mile farther. He also took to inquiring in various neighboring houses whether the postman had come, and this, of course, annoyed the neighbors. It did n't annoy them as much, however, as the postman's tardiness annoyed Lawton — nor nearly as much as when there was n't any mail on a particular day. When that happened he would get to imagining that his checks or his rejected stories had been lost in the

mail. This — even imagining it — is the worst thing that can happen to a writer.

All this, of course, tended to prey on Lawton's mind, and gradually led him to look on the postman as one who played a much more important part in his life than he actually did. A great many writers tend to become superstitious, and one of the reasons for this is that the things they write are sometimes accepted — or rejected — for causes which they themselves can't figure out. Lawton came gradually to ascribe his failures and his successes to the postman.

When he ran into that first bad streak of rejections, he did n't actually say or do anything to the postman; he merely thought, and cursed to himself. But as the days wore on he took inwardly to blaming him more and more. He came to hate the sight of the postman. Then, one day, Lawton's luck changed. The postman brought him two splendid checks in the same mail. He had gone farther down the road, of course, before Lawton made the discovery, but Lawton waited until he passed by on his return journey, greeted him cheerfully, and invited him in for a drink. They had three, and parted in high mutual esteem.

Lawton's luck held for a while, but of course he did n't set the postman up to drinks every day. There had been some trouble when the fellow returned to the post office that day. However, Lawton greeted him kindly, and thought very highly of him. And to all who brought the subject up he warmly praised the efficiency of the United States Mails. The postman, at this time, in addition to bringing him good news, was bringing it at an early hour.

And then Lawton's luck went bad again. This time it went very bad, and stayed bad. And at the same time the postman took to coming late. Lawton took it philosophically at first, and then he began to fret. Then he sulked. Then he fumed. He would stand up in the middle of his workroom,

rip rejection slips from envelopes, and curse the postman out loud. And he began to imagine ludicrous things. He imagined that the postman bribed editors to turn down his stories. He even got to imagining that he stole rejection slips from editorial offices and put them in Lawton's return envelopes himself. (It was an easy matter to persuade himself that the postman could counterfeit postmarks from distant cities.)

On one of those days when Lawton's imagination was running especially wild, the postman returned him a story into which he had put everything he had. It was one that simply could n't be turned down. It is really too bad about Lawton. He has to appear in court next week on a charge of assault and battery, and I myself really don't see how he can explain it and make anybody understand. There is irony in it, too, because the plaintiff, right now, is Lawton's best friend. He has accepted his last four stories.

TITULAR TOUR

WHEN my ship comes in I'm going to make a comprehensive tour of the United States. I'm not going to visit cities like Chicago, San Francisco, Philadelphia, or New Orleans; neither shall I be interested, on this trip, in seeing the wonders of Yellowstone Park, the Grand Canyon, or the Yosemite. Cook's will have no hand in arranging my itinerary; Rand McNally and Company will be my only guide.

I am going to places like Bippus, Indiana; Smackover, Arkansas; Kitzmillersville, Maryland; Co-Operative, Kentucky; Skiddy, Kansas; and Frostproof, Florida. My route will take in Licking, Missouri, too, and Dummer, New Hampshire; Winegar, Wisconsin; Telephone, Texas; Cheesequake, New Jersey; Kunkle, Ohio; and towns like Clackamas and Umpqua in Oregon.

I'm going to find out why Increase, Mississippi (population, 150), did n't, and why Rest, Arkansas, is a popular residence for only 40 people. Also where the hitch was in the plans of Expansion, North Carolina (population 75). Lotta, North Carolina (population 50), is another similar case I shall investigate. And what, I wonder, blasted the faith of the founders of Confi-

dence, West Virginia (population 200)? Success, Arkansas, did a little better, I notice, but still, 308 inhabitants are not much to brag about.

Another thing I should like to know is whether Defeated, Kentucky, and Odd, Virginia, really are, and how a place in Wisconsin came to rejoice in the title of Embarrass. And to find out how Fame, Oklahoma, got that way — I'd never heard of it before. It will be interesting, too, to find out whether towns like Economy, in Indiana, Frugality, in Pennsylvania, and Thrift, in Texas, were originally settled by the Scotch, and if there are any Scots in the towns of Gratis in both Ohio and Georgia, Treat, in Arkansas, and Liberal, in Kansas.

In view of the present national interest in monetary matters, I have placed Monie, Long Green, and Security, Maryland, on my itinerary, as well as Coin, Iowa; Wages, Colorado; Value, Mississippi; Cash and Dime Box, Texas; Cache Junction, Utah.

There are some pretty names that tickle my fancy, such as Harmony, which is to be found in several states; Ohio's trio, Fidelity, Fidelity, and Friendship; Bliss, Idaho; Contentnea, North Carolina; Coyville and Pretty Prairie, Kansas; Sublimity, Oregon; Gay and Benevolence in Georgia; Summer Shade, Kentucky; Welcome, Louisiana; Inspiration, Arizona; Keep Tryst, Maryland; Sweet, Idaho; Desire, Pleasant Unity, and Sabbath Rest, Pennsylvania; Joy, Utah; and Simplicity, Virginia. Texas has Blessing, Comfort, Goodnight, and Happy.

Every tourist agent knows you have to have romance in a tour, so I'm going to Love in Arizona, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas, Utah, and Virginia, and to Lover, Pennsylvania. Texas has a Loving and a Lovelady, and I'd like to know whether Loveless in both Alabama and Illinois is an old maid's paradise.

I want to find out why some hideously named towns don't make a change, such as Clam, in Virginia; Tumwater, Twisp, and Puyallup, in Washington; Hammer, South Dakota; Bumpus Mills and Soddy, Tennessee; Drain, Oregon; Hohokus and Lower Squankum, New Jersey; Sopchoppy, Florida; Zap, North Dakota.

Some towns I'm going to visit to see if they're as bad as they sound are

Muddy, Illinois; Bad Axe, Michigan; Hardburly, Kentucky; Hetch Hetchy Junction, California; Concrete, North Dakota; Slick and Swink in Oklahoma; Shirkieville, Indiana. And two others I'd like to know more about are Soso, Mississippi, and Oso, Washington.

There seem to be quite a number of places that might lay claim to having the shortest names. Alabama has Ai and Ur; Texas, Ka and Re; Kentucky, Ed and Ep; Ohio has Ox, and Tennessee, Ho. And I'm going to ask someone in Tom Brooks, Maryland, why, after all these years, they recently dropped its former designation of T. B. and gave it its full name.

For sublime modesty, Humble, Texas, seems to take the cake, or perhaps it's Only, Tennessee. When I get back I'll know which is the more shrinking violet of the two. And I'm going to find out whether Gravity, Iowa, and Clever, Missouri, really are. Two other Missouri towns on the route are Nobby and Peculiar. Then Best, in Texas, is down for a call, and Pahump, Nevada, which, to make a very bad pun, is like the sound of a great ahem.

I plan to spend Christmas in either Santa Claus, Indiana, or Christmas, Arizona. I want to see the places that have numbers instead of names — Ninety Six, South Carolina; Hundred, West Virginia; Seventy-six, Missouri; and Old Hundred, North Carolina. Also Six Mile, in South Carolina; Bermuda Hundred, Virginia; Twelve Mile, Indiana; Seven Mile and Fivemile, in Ohio; and Twentynine Palms, California. I'm going to spend a day in Day, Arkansas, half a day in Halfday, Illinois, and visit Shorter, in Alabama, Many (population, 1239) and Iota (827), in Louisiana. North East, in Maryland and Pennsylvania; Due West and North, in South Carolina; and North, Virginia, are also scheduled.

Here are some others that I've put down just for the fun of it — Alpha and Omega, in Ohio; Spion Kop, Montana; Platter, Oklahoma; Guess, South Carolina; Willie, Georgia; and Kidder and Okobojo, South Dakota. I wonder, too, if Justus, Ohio, is a settlement of newly-weds; if Okay, Oklahoma, is all right; whether Pee Dee, North Carolina, and Jayess, Mississippi, and Pe Ell, Washington, are somebody's initials. I want to stop at Romulus and Remus in

Michigan, and see if there is any connection between Cruise and Cuba in Missouri.

I shall go to Adamant, Vermont, because it conjures up a picture of embattled farmers fighting the rocks and boulders of the Green Mountain State. Others of the same style are Grit, Kentucky; Vim, Colorado; Ready, Michigan; Energy, Illinois; Brave, Pennsylvania, and Bravo, Michigan. Also Quick, South Carolina; Hasty, North Carolina; Hurry, Maryland, and Speed, Missouri; Difficult, Tennessee, and Difficulty, Wyoming. Chilly, Idaho; Chillum, Maryland; and Frozen, West Virginia, sound like good places to spend a summer, and Chili, Indiana, ought to be a hot place. Speaking of hot places, I've been unable to find a Hell or Purgatory, although a locality near Newport, Rhode Island, has the latter title.

Here are still others I don't want to miss — Cornucopia, Oregon; What Cheer, Iowa; Dlo and Reform, Mississippi; Horseheads and Candor, New York; Callaboose, Kentucky; Golf and Polo, in Illinois; the towns of Mutt and Jeff, in Texas; Plain Dealing, Yscloskey, Water Proof, Solitude, Strange, and Tickfaw, in Louisiana; Dames Quarter, Accident, and Choptank, Maryland; Brethren, Amble, Detour, and Maybee, Michigan; Ketchum, in Oklahoma and Idaho; Buncombe, Preemption, and Winkle, in Illinois; Fry, Experiment, Social Circle, Young Harris, and Towns, in Georgia; Normal, Praise, and Stamping Ground, in Kentucky; Hill and Dale, Ohio; Lo Lo, Montana; Loco, Non, Gerty, and Corn, in Oklahoma; Finger and Dukedom, in Tennessee.

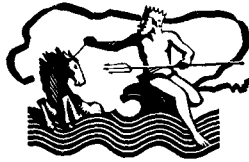
There are some queer ones in Pennsylvania — Bally, Quakake, Shickshinny, Bird in Hand, Loyalsock, Distant, Drums, Seek, Espy, and King of Prussia. Texas has Scurry, Wink, Blanket, Merit, Pettus, Pert, and Peach. In Virginia are Lively, Wily, and Wise. South Dakota boasts of Oral and Tea; Washington has Cle Elum and Start-up; Antiquity is in Ohio; Plush, Neverstil, Talent, and Sisters are in Oregon, and Fried and Omemee in North Dakota. I like the sound of Nyssa, Oregon. I'm going to stop off at both Maiden and Manly, North Carolina, and want to be in Monday, Ohio, on that day.

It's going to be a lot of fun and I expect to learn a great many interesting things. And that will be another story.



Walter Lippmann

AND THE ATLANTIC



It will be of great interest to every reader of the *Atlantic Monthly* . .

to know that we have formed an association with Mr. Walter Lippmann whereby sometime after his return from Europe he will write regularly for the magazine, dealing with the fundamental questions of economics, politics, and morals which underlie our social structure and give form and meaning to our lives.

Ellen Pedgwick.
EDITOR

THE CONTRIBUTORS' COLUMN

BACK in 1927, Revolution meant not the peaceful infiltration of a new social philosophy, but the violent upheaval of a great country which to the Western world had seemed to sleep for centuries. Since the events that aroused in **Vincent Sheean** 'the desire to attend, to witness, were invariably those in which large numbers of men were engaged in some difficult enterprise involving a fundamental idea,' to China he had to go, continuing the exciting and restless life of a foreign correspondent which had engaged him, body, mind, and spirit, since his graduation from the University of Chicago in 1920. 'Youth and Revolution' is more than the record of a personal adventure, however; it epitomizes the universal experience of Youth at its most alive and passionate moment, when ideals seem worth dying for and symbols have substance. **Everett Case** ('What Are Republicans For?') is a young Princetonian who has taken an honors degree in Modern History from Cambridge University, and is now working on his doctoral thesis at Harvard. Much of his practical philosophy may have been absorbed from a six-year association with the General Electric Company as assistant to Owen D. Young. **Hans Zinsser** is well known to the medical profession as a distinguished professor at Harvard Medical School, but his *Textbook of Bacteriology and Infection and Resistance* have not won him the admiring circle of lay readers which 'The Deadly Arts' will gather about him. He is as informed and amusing on biography and bugaboos as he is on bacteria and bugs, and the benevolent shadow of My Uncle Toby seems to hover over all. Δ 'No Bird' is another short lyric by **Theodore Roethke**, a young instructor in English at Lafayette College whose work is beginning to appear frequently in magazines. **Paul Hoffman**, whose first story, 'Late Love,' we published last February, graduated from Harvard in 1932 and has been writing with growing success ever since. 'Hede' may be assumed to have sprung from his native Utica, New York, where his father is a Lutheran clergyman. Δ No one is better fitted to write on the modern

phenomenon of 'Streamlining' than **Norman Bel Geddes**, Michigan-born designer of portraits, of advertisements, of stage productions, finally of industrial and architectural products. Explanations and prophecies of industrial design emanate with peculiar authority from the man whose ideas are so prolific that he employs a staff of twenty-five assistants to help execute them. **William Henry Chamberlin's** 'Farewell to Russia' marks the close of ten years' service in Moscow as special correspondent of the *Christian Science Monitor*. Now that he has been transferred to the Far East, Mr. Chamberlin has the freedom and the perspective to write of Russia more frankly than the ordinary observer can. *Russia's Iron Age*, to be published by the Atlantic Monthly Press on October 26, will contain this and other essays. **Jean Batchelor** ('Autumn Evening') has moved from her native Pennsylvania to New York City, and is likewise enlarging her poetic horizon by appearing in anthologies on both sides of the Atlantic.

Readers who remember the 'Hick College' papers of **Wendell Brooks Phillips**, a New Englander who has transferred his allegiance to Georgia, will welcome 'Summer among the Varmints,' his account of a vacation from Piedmont College, where he is Professor of English. **Katharine Hamill's** succinct outline of her life makes it hard to place 'Leora's Father.' The reader may choose among the following localities: 'Born in Hinsdale, Illinois, went to boarding school at Farmington, Connecticut, worked for five years in political campaigns in Illinois, for one year as a reporter on the *Chicago Herald and Examiner*; have lived for about ten unconservative years in Jackson County, Mississippi; for one year in Wyoming; eight months in Europe; three years in New York, where I worked on *Fortune* magazine.' She has now gone to New Hampshire for a year, and this is the first fiction she has sold. Δ 'The Battle of Boston Common' will recall war-time committee work to many people who, unlike Dr. Cushing, never got

Appendicitis Warnings



"I can give it to you, of course. But if I were you I wouldn't take anything for it without the advice of a doctor. Those abdominal pains may mean appendicitis."

THE symptoms of appendicitis vary. Almost always, continued pain and tenderness in the abdomen are the first indications of an acutely inflamed appendix. Of course, not all intestinal aches are caused by appendicitis, but anyone who has continued, unrelieved abdominal pain, especially if it is accompanied by nausea or vomiting, needs competent medical attention at the earliest possible moment and not self-medication.

If it is appendicitis the use of a laxative is dangerous. It stimulates violent intestinal action and may spread the inflammation, cause the appendix to rupture, or induce peritonitis. Moreover, the sufferer should not be given food, drugs or medicine of any kind unless prescribed by the attending physician.



Send for your doctor immediately if there is any suspicion of appendicitis. In making his diagnosis he may find it necessary to make one or more blood cell counts or to observe your temperature for a few hours, keeping you quietly in bed under close observation.

Your doctor may decide that the attack does not clearly denote appendicitis and can be relieved without an operation. But if it is a clear case of acute appendicitis, he will probably recommend an operation within the shortest possible time.

Performed by an expert surgeon, early in the attack, before the appendix has burst or peritonitis has begun, an operation for acute appendicitis should cause little concern.

METROPOLITAN LIFE INSURANCE COMPANY

FREDERICK H. ECKER, PRESIDENT

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nearer the front than Boston Common. It is taken from the Journal of **Harvey Cushing**, D.S.M., Professor of Surgery first at Harvard, now at Yale. Δ 'The New Wine in Germany' should recall a Biblical reference as well as give a first-hand impression of Germany to-day. **William Orton**, Professor of Economics at Smith College, has just returned from a summer in Europe. Δ 'Cinderella at Puka-Puka' comes to us from that enchanted isle through the good offices of **Robert Dean Frisbie**, who lives there momentarily expecting it to revert to savagery before the yearly man-o'-war comes round to establish communication with the outside world. **Charles D. Stewart**, a familiar *Atlantic* contributor, writes of 'The Colors of Nature': 'The substance of this piece cannot be found in physics, or chemistry, or biology, but in *all* of them, by breaking down the water-tight compartments of universities.' Δ One of **Jane Ayer Cobb's** earliest recollections of her father, Frank Cobb, is of a summer afternoon 'when he came into the house flourishing a copy of the *Atlantic* and looking awfully pleased because something that he had written was printed in it.' She thinks that now, since her first acceptance ('Widowed'), she knows just how pleased he was. Δ From his earliest youth, **George E. Sokolsky** has had a passionate interest in labor problems. In the past two years he has made an exhaustive first-hand study of conditions from coast to coast, and 'Labor's Broken Front' summarizes his findings.

To make his own position unmistakably clear, Mr. Sokolsky sends this letter as a footnote to his three articles on the labor problem: —

Dear Atlantic, —

My first two articles ('Labor's Fight for Power' and 'Recognizing the Company Union') brought me many letters indicating that the problems they raised required an ideological synthesis to clarify the process by which I reached my conclusions. My third article [published in this issue] attempts such a restatement, and then analyzes the question of the solidarity of labor.

I have made no attempt to set forth one particular theory to govern the relations of capital and labor. Rather, my effort has been to achieve an objective discussion, from every point of view, of the most pressing problem before the American people to-day. I myself have no pet theory. I view the struggle from the point of view of historic objectivity.

The struggle between capital and labor exists

in America as it must in all industrialized countries. In each place its characteristics are different, depending on each country's industrial development, its form of political organization, the psychology of its people, its educational facilities, and its traditional social attitudes. It is often assumed that a system will succeed in one country because it has succeeded in another, but the fact remains that Communism established itself in Russia but failed to gain a foothold in Italy, Germany, China, and Turkey. In this generation it is impossible to draw any conclusions as to the ultimate failure of capitalism because, as yet, there has been no victory for any of the substitutes for capitalism. Judgment on that subject is for posterity.

GEORGE E. SOKOLSKY
New York City

A hard winter for Hilda Rose.

Dear Atlantic, —

Many persons, not knowing that I had a special interest in Hilda Rose, have spoken to me urging me to read her diaries in the *Atlantic*, saying that nothing had affected them so much in a long time, and that they kept on thinking about her, wondering what was happening to her now. Thus I have come to realize that Hilda Rose must have very many unknown friends who are waiting for the next chapter of her history.

Such appalling news has recently been coming to me from those Arctic regions that I feel I must, without consulting her, share it with them.

Last winter in Alberta was the most severe in forty-four years. When spring finally came, there was an ice jam in the river, followed by a flood that turned the whole valley into a torrent and left a lake five miles long. The Roses' cabin up on the hillside was not swept away, but their farm is still under that water. They started potatoes and vegetables in their kitchen garden plot and hopefully counted on these for the winter; then a hard frost came in July and destroyed nearly everything. More hard frosts were due in August. There were not even berries in the woods last summer.

Anyone who wants to help make it possible for her to go on, and with her husband and Karl live through the new winter which is already upon them, can address her direct: Hilda Rose, Fort Vermilion, Alberta, Canada. Let her think it is just a slightly weighted fan mail coming in in anticipation of Christmas.

MARGARET G. EMERSON
New York City

Stuarts and Stewarts.

Dear Atlantic, —

On the inside back cover of the September *Atlantic* you print a picture of the magazine for that same month and I note in the list of contents

Known Facts ABOUT SOUTHERN CALIFORNIA

Los Angeles is nearer to New York than New York is to Los Angeles. (You gain 3 hours on the way in going West.)

★

Both the highest (Mt. Whitney) and the lowest (Death Valley) points in the U. S. are in Southern California.

★

California has been under five flags: Indian, Spanish, Mexican, California Bear Republic and U. S.

★

Southern California's geographic extremes represent climatic extremes. Barriers of ocean, mountains and desert keep temperatures even.

★

Papayas, sapotes, mangoes, cherimoyas, passion fruit, feijoas, jujube, litchi, ceriman are among the tropical fruits growing here.

★

National radio programs are moving from New York to Hollywood because of greater supply of talent and celebrities.

★

Despite the presence of 55 cities, including Los Angeles, Hollywood, Long Beach, Pasadena, Santa Monica, Glendale, Beverly Hills and Pomona, Los Angeles County leads all U. S. counties in value of agricultural products.

★

Living costs in Southern California are 18% under the average for the U. S. (less than half the costs in many winter resorts.)

★

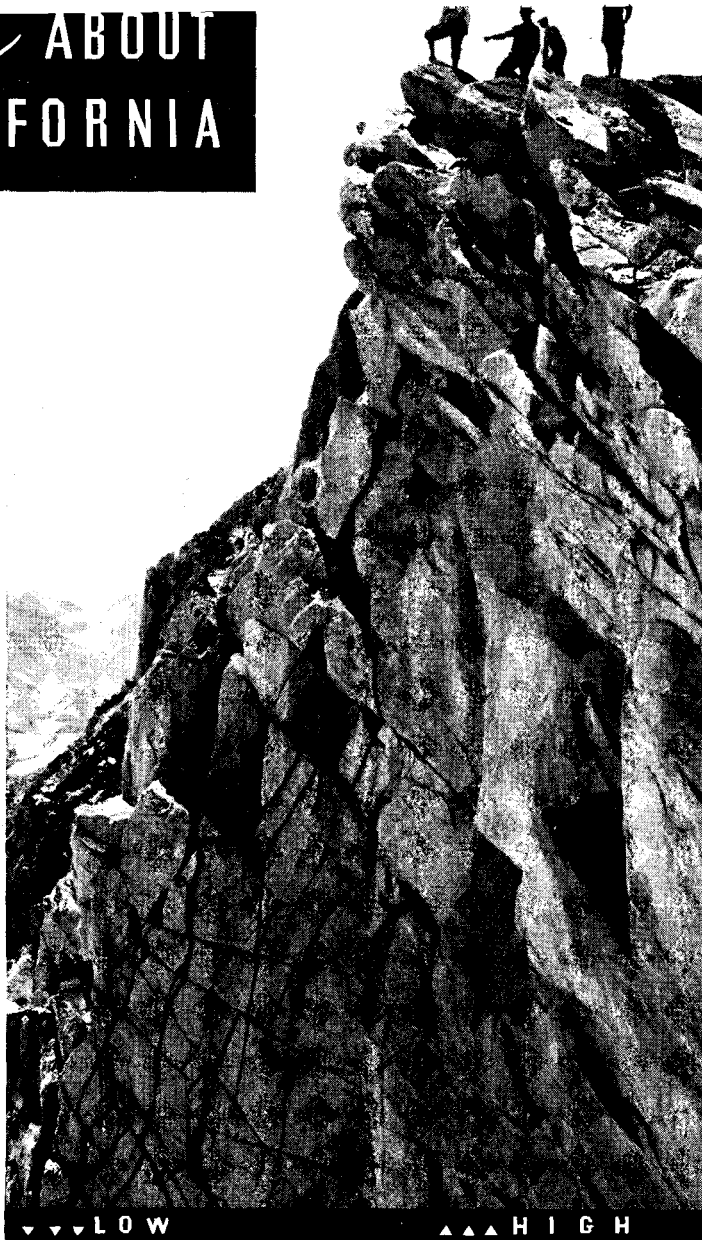
Southern California has 270 miles of ocean beach, more than 1000 mountain lakes, 500 streams, but is tapping the Colorado River for still more water.

★

The world's oldest and largest living thing (5000-year-old tree) is in Southern California.

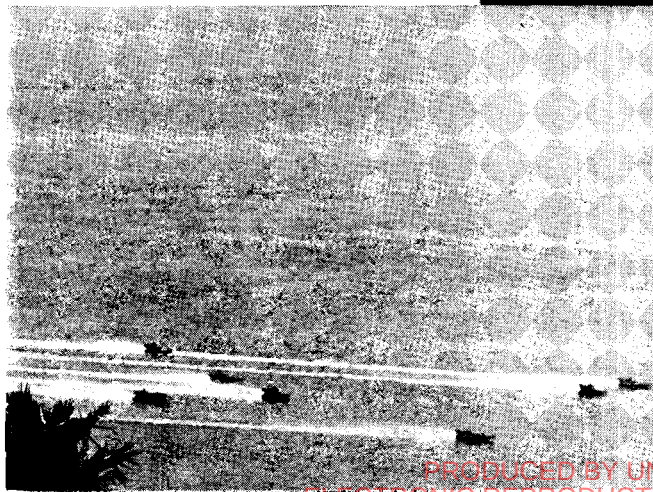
★

Within 200 miles of Hollywood, the studios shoot almost every type of scenery to be found throughout the world, including the Alps, South Seas, Sahara, and Black Forest.



▼ ▼ ▼ LOW

▲ ▲ ▲ HIGH



You can have **FREE** an interesting 72-page book answering all your questions about a Southern California vacation (what to do and see, itemized costs, over 100 photographs, map, etc.) by sending the coupon below. Impartial facts; no obligation.

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Send me free book with complete details (including costs) of a Southern California vacation. Also send free routing by ☐ auto, ☐ rail, ☐ plane, ☐ bus, ☐ steamship. Also send free booklets about counties checked: ☐ Los Angeles, ☐ Santa Barbara, ☐ Inyo, ☐ Orange, ☐ Riverside, ☐ San Diego, ☐ Ventura, ☐ Imperial, ☐ Mission Trails

Name _____

an article by me, 'The Colors of Nature.' But when I look at the actual cover of that number I see no such article. It was first put in the magazine and the title put on the cover; then it was taken out and the cover was reprinted. In place of it I note an article entitled 'Will the Hohenzollerns Return?'

Evidently a case of throwing out a Stewart to put in a Hohenzollern.

The Stewarts began to be kings of England with James the First, and they have been at it ever since. Before that they had been rulers of Scotland for three hundred years. Queen Victoria and her present descendants owe their position to the fact that they are descended from the Stewart line. The house of Bavaria is of Stewart origin and so is the house of Orleans.

Now as to the proper way of spelling the name. The true royal spelling is *Stewart*. When Mary Queen of Scots was a girl she spelled her name Stewart as all had done before her; but when she went to be Queen Consort of France she was confronted with a difficulty. In the French language there is no *w*, and, as the name had to be spelled some way, she did it with a *u*. Her sons and grandsons, the kings of England, continued the practice; and that is how the spelling was changed. They were all of them dictators, corresponding exactly to the latest political requirements.

I call your attention to these things hoping you will print 'The Colors of Nature' at the first opportunity and that hereafter you will not throw me out in favor of any modern royalty.

CHARLES DAVID STEWART
Hartford, Wisconsin

P. S. Banquo, in Shakespeare's tragedy *Macbeth*, was a Stewart, being related to King Duncan. And Banquo's Ghost, I might add, was a Stewart ghost. We rise up to hant them that cross us.

[Editor's Note: Call off your ghost. The *amende honorable* is made in this issue.]

The Decalogue and the New Deal.

Dear Atlantic, —

God Almighty on a mountain top issued Ten Commandments. The New Dealers are only started and have issued ten thousand: —

Thou shalt not clean a suit of clothes for less than 70 cents.

Thou shalt not sell a loaf of bread or a pint of milk for less than so many copper coins, lest the Blue Eagle turn and rend thee.

Thou shalt not raise more than so many measures of wheat.

Of little pigs shalt thou sacrifice 6,000,000.

Thou shalt hire men out of the bread line, paying them more than thou hast made for years, or,

failing so to hire, thou shalt do all that thou canst to make the bread line a pleasant place to abide.

Gold and silver are quite too good for thee: deliver them to thy rulers.

Thou shalt open and close thy store, thy purse, and thy mouth as ordered by the sacred Blue Eagle and his keepers.

Thus on and on. . . .

. . . And God covered human behavior with Ten Commandments!

R. C. ERSKINE
Seattle, Washington

More signs of the times.

Dear Atlantic, —

Did Mr. Edward Weeks travel too fast through Laconia to see this sign?

MOUNTAIN VIEW FARM
POULTRY OF ALL KIND LIVE OR DRESSED
BROILERS ROASTERS FOWL
AND EGGS FOR HATCHING COLLIE PUPS

EDNA H. LITTLE
Marlborough, Massachusetts

Dear Atlantic, —

As an organizer of government libraries for many years, I was sent East and West, and sometimes over the cuckoo's nest, and many signs did I see.

At Marion, Indiana, in the basement of the Y. W. C. A. building, was a Negro chiropodist whose shingle read: —

LIMP IN AND WALK OUT

At Kansas City, Missouri, was a sign swinging in the wind: —

JOE TRIMMER THE TINNER
AND THAT AIN'T NEAR ALL

HELEN CARSON
Dayton, Ohio

The truth about China.

Dear Atlantic, —

Mr. J. O. P. Bland's accurate and discerning survey of the situation in China ('The Chinese Mind,' in your October issue) should have the prompt commendation and support of everyone familiar with that situation. The present so-called Nanking Government is merely despoiling the country, driving the peasantry into brigandage and Communism, and making more and more hopeless any prospect of unification in China. And unless the rest of the world proposes to do something about it the task should be left to Japan, which is the nation most directly concerned.

MARC T. GREENE
Boothbay Harbor, Maine